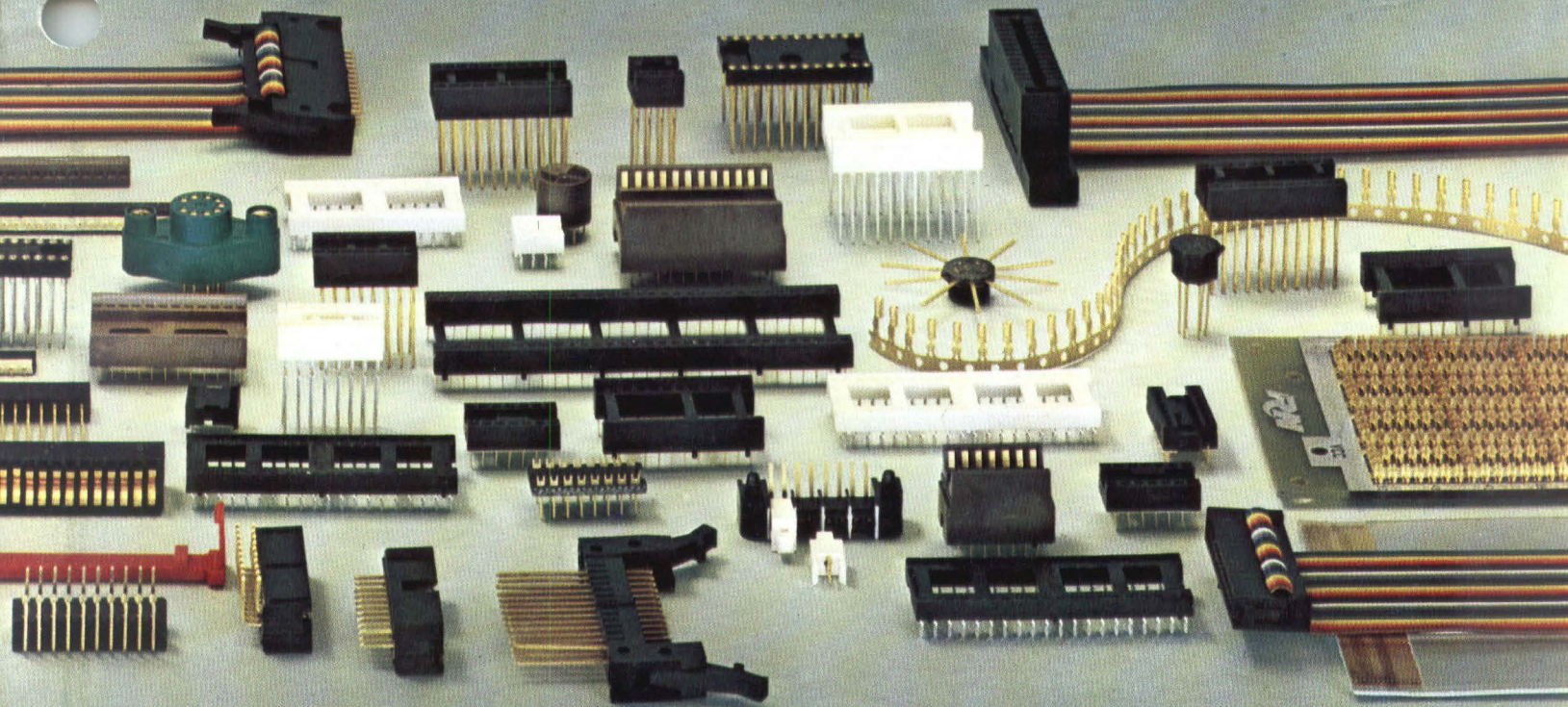


RN ROBINSON NUGENT, INC.

IC SOCKETS · INSULATION DISPLACEMENT CONNECTORS · QUICK/CONNECT



RN ROBINSON NUGENT, INC.

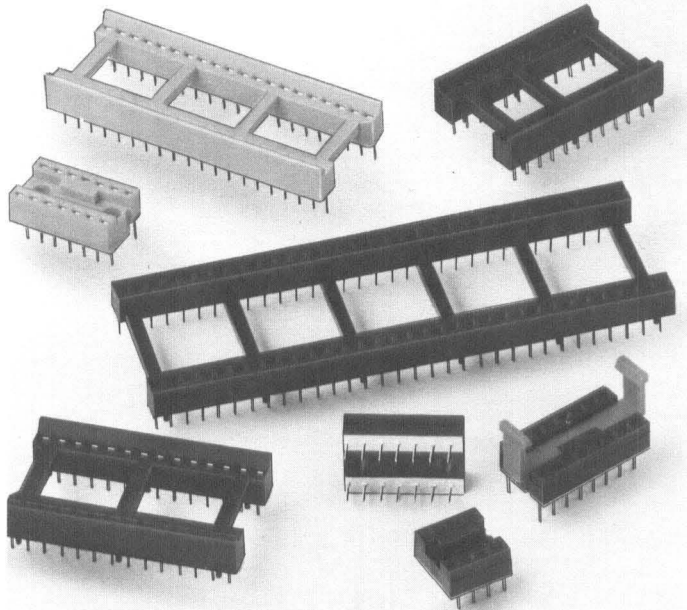
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ROBINSON NUGENT INC. • 800 EAST EIGHTH STREET • NEW ALBANY, INDIANA 47150 U.S.A.
PHONE: (812) 945-0211 / TWX: 810-540-4082 / CABLE: ROBNU

R-N EUROPE, S.A. • RUE PAUL LAUTERS 38A • 1050 BRUXELLES • BELGIUM
PHONE: (02) 640-79-40 / TELEX: 62432 RNEUR

ICN SERIES, SOLDER DIP



- **General Purpose High Reliability Socket**
- **Tin/Gold Plating Option Available**
- **BeCu Contact Option Available**
- ***RN* Side-Wipe Contact Design**
- **Cable Assembly Retaining Clips Available**

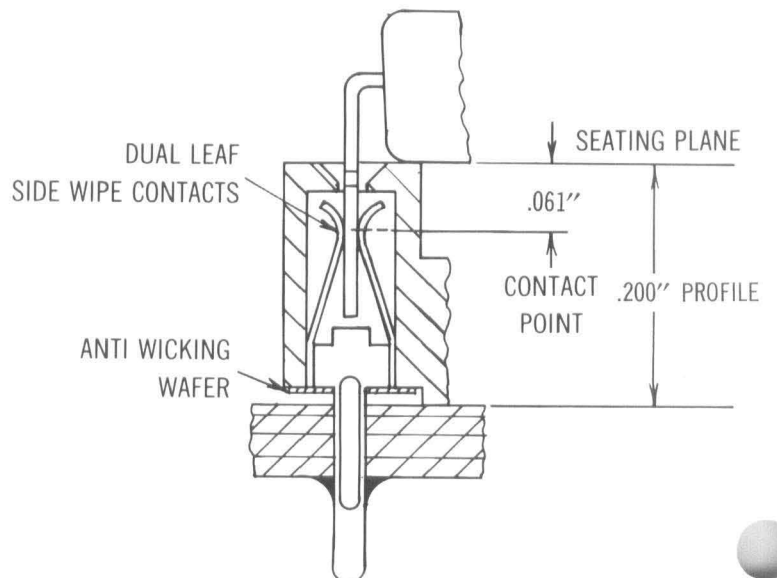
The ICN Series features the RN dual leaf side wipe contact design. This design increases contact area by 100% over edge-bearing type contacts. The side wipe design contacts the smooth flat side of the IC lead rather than the thin rough edges which are used by the products with edge-bearing contact design. Extensive test data and a booklet evaluating all popular contact systems are available from RN. This contact system and the glass-filled polyester body which meets UL 94V-0 flammability rating makes the ICN Series popular for almost every application where 100 or more in/out cycles are required.

Tin/Gold plating option (Suffix-TG) uses gold only in the contact area and tin is plated on the terminals. The duplex plating maintains the noble metal in the contact area and also allows excellent solderability, thus providing high reliability at reasonable cost.

The ICN Series is supplied in "Protecto-Pak" tubes for easy handling. The -S4 configuration offers the E-Z entry feature to help guide leads on large LSI devices into the contact area. The contacts are protected from damage by closed entry mold design. Any probe which is large enough to damage the contacts cannot pass through the mold opening. The contact is designed to accept leads up to .015 inch thick. The -S4 and -S5 products have rib type body structure which improves convection cooling around large LSI devices. All ICN products are supplied with anti-wicking wafers and stand-offs for easy flux removal.

Beryllium Copper Option

The ICN Series is available with Beryllium Copper contact option. This option can be used for maximum insertion applications and highest reliability requirements. To order Beryllium Copper contact products, add "B" to part number. Example: ICN-163B-S3-G.



PRODUCTION SOCKETS

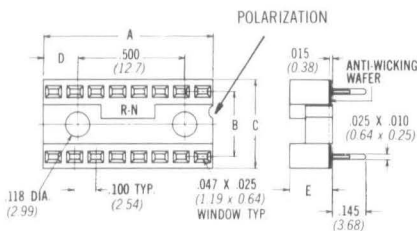
ICN SERIES, SOLDER DIP

Part No.	Detail	No. of Contacts	DIM. A	DIM. B	DIM. C	DIM. D	DIM. E
ICN-063-S3-X	A	6	.295 (7.49)	.300 (7.62)	.405 (10.28)	— —	.200 (5.08)
ICN-083-S3-X	A	8	.395 (10.03)	.300 (7.62)	.405 (10.28)	— —	.200 (5.08)
ICN-143-S3-X	A	14	.695 (17.65)	.300 (7.62)	.405 (10.28)	.113 (2.87)	.200 (5.08)
ICN-163-S3-X	A	16	.795 (20.19)	.300 (7.62)	.405 (10.28)	.163 (4.14)	.200 (5.08)
ICN-183-S3-X	A	18	.895 (22.73)	.300 (7.62)	.405 (10.28)	.213 (5.41)	.200 (5.08)
ICN-203-S3-X	A	20	.995 (25.27)	.300 (7.62)	.405 (10.28)	.263 (6.68)	.200 (5.08)
ICN-224-S4-X	B	22	1.095 (27.81)	.400 (10.16)	.575 (14.61)	— —	.235 (5.97)
ICN-224-S5-X	C	22	1.095 (27.81)	.400 (10.16)	.505 (12.83)	— —	.200 (5.08)
ICN-244-S4-X	B	24	1.195 (30.35)	.400 (10.16)	.575 (14.61)	— —	.235 (5.97)
ICN-246-S4-X	B	24	1.195 (30.35)	.600 (15.24)	.775 (19.68)	— —	.235 (5.97)
ICN-246-S5-X	C	24	1.195 (30.35)	.600 (15.24)	.705 (17.91)	— —	.200 (5.08)
ICN-286-S4-X	B	28	1.395 (35.43)	.600 (15.24)	.775 (19.68)	— —	.235 (5.97)
ICN-286-S5-X	C	28	1.395 (35.43)	.600 (15.24)	.705 (17.91)	— —	.200 (5.08)
ICN-406-S4-X	B	40	1.995 (50.67)	.600 (15.24)	.775 (19.68)	— —	.235 (5.97)
ICN-406-S5-X	C	40	1.995 (50.67)	.600 (15.24)	.705 (17.91)	— —	.200 (5.08)
ICN-426-S4-X	B	42	2.095 (53.21)	.600 (15.24)	.775 (19.68)	— —	.235 (5.97)
ICN-649-S5-G	C	64	3.195 (81.15)	.900 (22.86)	1.075 (27.31)	— —	.235 (5.97)

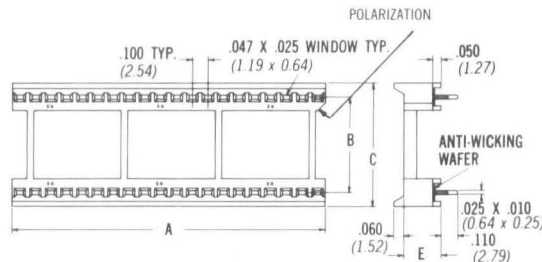
"X" denotes contact finish; specify "TG" for tin/gold, "G" for gold, "T" for tin (see materials below).

NOTE: For Beryllium Copper contact option, add "B" to part number. Example: ICN-163B-S3-G.
Beryllium Copper contacts are gold plated. Contact factory for other plating options.

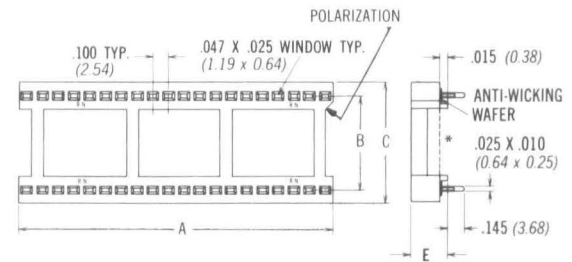
in. (mm) **DETAIL A**
-S3



DETAIL B
-S4



DETAIL C
-S5



***NOTE:** For ICN-649-S5-X connecting rib is located along bottom, lead length is .110" and standoff is .050".

MATERIALS: (For applicable Mil Spec see Test Data section.)

BODY: Black polyester, glass-filled

CONTACTS: Phosphor bronze or Beryllium Copper (See Note)

CONTACT FINISH: Suffix TG, Contact Area:

10 μ inch (.254 μ m) min. gold
over 50 μ inch (1.27 μ m) min. nickel

Terminal Area:

50 μ inch (1.27 μ m) min. electro tin
over 50 μ inch (1.27 μ m) min. nickel

Suffix G, 10 μ inch (.254 μ m) min. gold
over 50 μ inch (1.27 μ m) min. nickel
on contacts, gold flash on terminals

Suffix T, 30 μ inch (.762 μ m) min. hot
tin dip and wipe

RATINGS:

TEMPERATURE RANGE: -65°C to +125°C

FLAMMABILITY: UL 94V-0

MOUNTING INFORMATION:

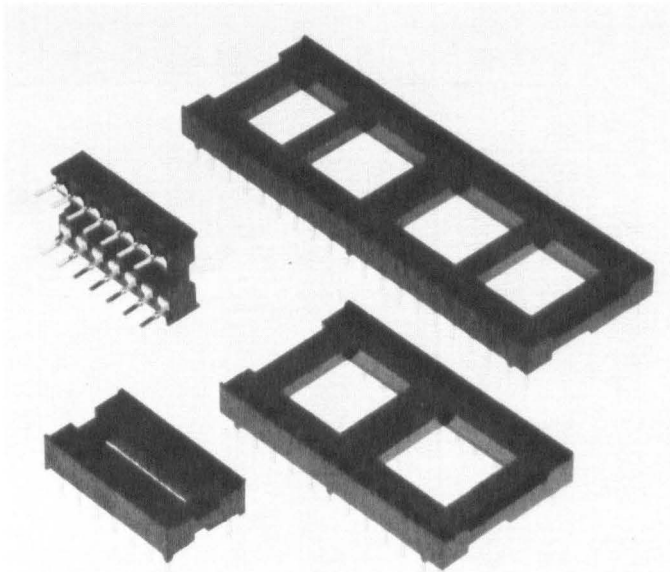
PCB HOLE: .035 ± .002" (0.89 ± 0.05)

LOCATION: Socket leads are offset .026" (0.66)
toward pin #1 from IC leads.

TEST DATA:

See Data Section at back of Catalog.

ICL SERIES, SOLDER DIP



- Low Profile High Reliability Socket
- Tin/Gold Plating Option Available
- MIL-S-83734 Approved Version Available
- PCB Automatic Insertable Option Available
- Anti-Overstress Contacts
- Vibration Resistant
- Low Cost "ICU" Option Available
- Maximum Board Density

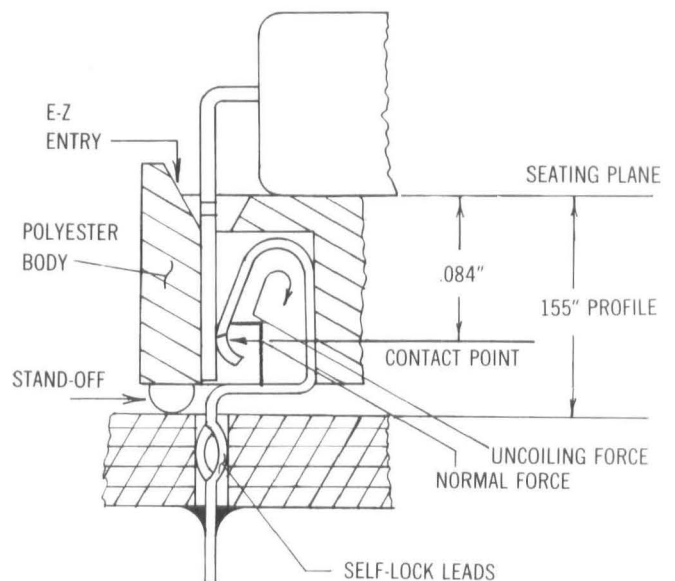
The ICL Series DIP socket has been designed for high volume applications where reliability is required. It is also available as a Military Approved socket qualified to MIL-S-83734. In addition to the low price, RN has incorporated several design features to maximize productivity in these high volume applications. The low profile allows very dense board-to-board spacing, although to take full advantage of the socket profile, some IC leads may need to be clipped. The socket is stackable side-to-side and end-to-end to optimize board surface usage. The polarization slots permit automatic handling and the lead entry has the RN "E-Z" entry feature to guide the IC leads into the socket. There is a stand-off to facilitate board cleaning and the "self-lock" leads are designed to hold the socket firmly in place during wave soldering. The body material is glass-filled polyester which will meet the UL 94V-0 flammability rating.

The contact design is another interesting feature of the ICL Series (see drawing). The ICL Series uses the reliable beryllium copper side-wipe contact in a unique contact configuration to provide the ideal condition of 1.) easy IC insertion and, 2.) high retention force. The insertion force is low because of the long moment arm of the socket contact. The retention force is high (making the socket vibration resistant) because as the IC lead is withdrawn it must overcome two forces: 1.) the normal force provided by the spring itself and 2.) an additional force caused by the uncoiling of the contact during IC withdrawal. The uncoiling force tends to augment the normal force thereby increasing the retention. The contact is designed to accept leads up to .015 inch thick and is recommended for applications where 50 in/out cycles are required.

Tin/Gold plating option (Suffix -TG) uses gold only in the contact area and tin is plated on the terminals. The duplex plating maintains the noble metal in the contact area and also allows excellent solderability, thus providing high reliability at reasonable cost.

ICU OPTION

The ICU option is a low cost variation to the ICL Series. It will meet all of the dimensional specifications of the ICL Series. It is recommended for applications where less than 25 in/out cycles are sufficient. To order ICU products, substitute ICU for ICL in the part numbers listed in the accompanying chart.



PRODUCTION SOCKETS

ICL SERIES, SOLDER DIP

Part No.	No. of Contacts	DETAIL	DIM. A	DIM. B	DIM. C
ICL-083-S6-X	8	A	.395 (10.03)	.300 (7.62)	.395 (10.03)
ICL-103-S6-X	10	A	.495 (12.37)	.300 (7.62)	.395 (10.03)
ICL-143-S6-X	14	A	.695 (17.65)	.300 (7.62)	.395 (10.03)
ICL-163-S6-X	16	A	.795 (20.19)	.300 (7.62)	.395 (10.03)
ICL-183-S6-X	18	A	.895 (22.73)	.300 (7.62)	.395 (10.03)
ICL-203-S6-X	20	A	.995 (25.27)	.300 (7.62)	.395 (10.03)
ICL-224-S7-X	22	B	1.095 (27.81)	.400 (10.16)	.495 (12.37)
ICL-246-S7-X	24	B	1.195 (30.35)	.600 (15.24)	.695 (17.65)
ICL-286-S7-X	28	B	1.395 (35.43)	.600 (15.24)	.695 (17.65)
ICL-406-S7-X	40	B	1.995 (50.67)	.600 (15.24)	.695 (17.65)

"X" denotes contact finish; specify "TG" for tin/gold, "G" for gold, "T" for tin.

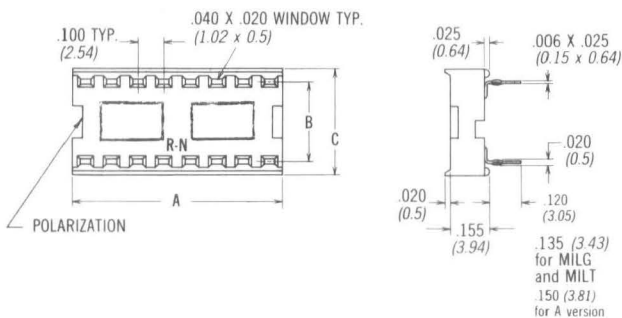
ON ICL ONLY — specify "MILG" for Military gold, "MILT" for Military tin. (See materials below)

NOTE: For ICU option, substitute ICU for ICL in part number.

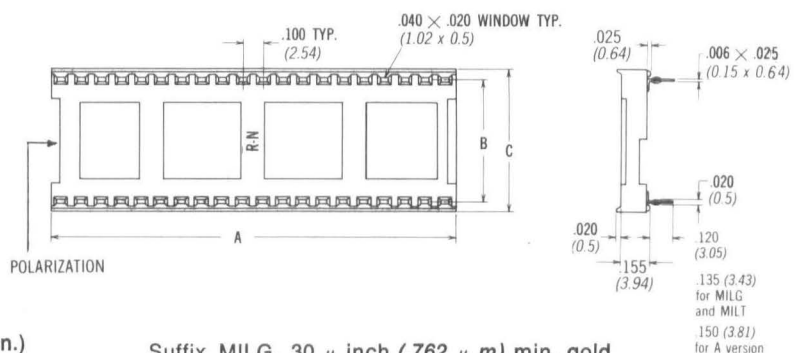
For automatic insertable socket — add "A" to part number.

Example: ICL-163-S6A-G

in. (mm) **DETAIL A**
-S6



DETAIL B
-S7



MATERIALS: (For applicable Mil Spec see Test Data section.)

BODY: Black polyester, glass-filled

CONTACTS: Beryllium copper; except ICU is phosphor bronze

CONTACT FINISH: Suffix TG, Contact Area:

10 μ inch (.254 μ m) min. gold
over 50 μ inch (1.27 μ m) min. nickel

Terminal Area:

50 μ inch (1.27 μ m) min. electro tin
over 50 μ inch (1.27 μ m) min. nickel

Suffix G, 10 μ inch (.254 μ m) min. gold
over 50 μ inch (1.27 μ m) min. nickel
on contacts, gold flash on terminals

Suffix T, 30 μ inch (.762 μ m) min.
hot tin dip and wipe

Suffix MILG, 30 μ inch (.762 μ m) min. gold
over 75 μ inch (1.91 μ m) min. nickel
per MIL-S-83734

Suffix MILT, 180 μ inch (4.57 μ m) min. electro tin
per MIL-S-83734

RATINGS:

TEMPERATURE RANGE: - 65°C to + 125°C

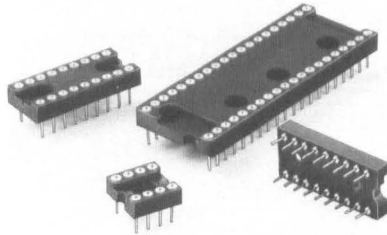
FLAMMABILITY: UL 94V-0

MOUNTING INFORMATION:

PCB HOLE: .031 ± .002" (0.79 ± .05)

LOCATION: IC lead and socket leads
are coincident.

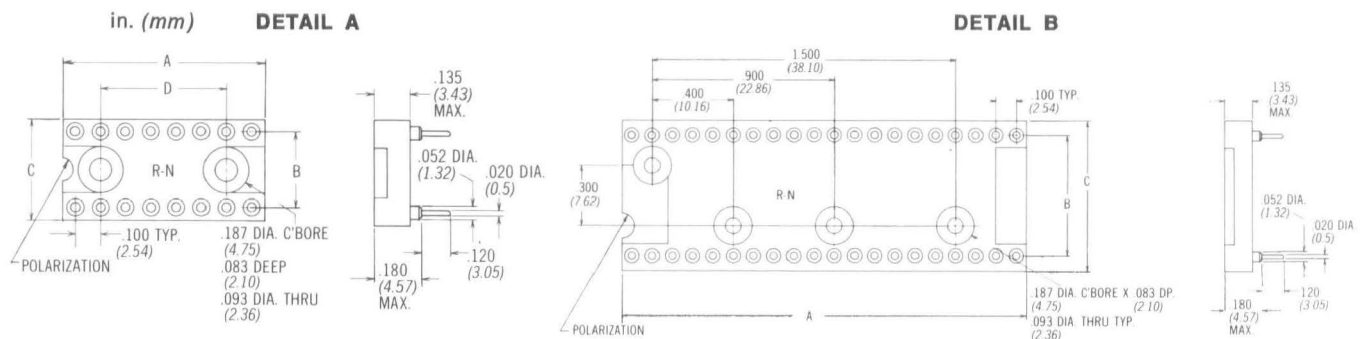
ICA SERIES, SOLDER DIP



- Pin Socket Contacts for High Reliability and High Retention
- Four Finger BeCu Contact Accepts Short IC Leads
- Low Profile Body with Mounting Holes Provided
- Low Cost Tin Plated Shell/Gold Contact Option Available

Part No.	Detail	No. of Contacts	DIM. A	DIM. B	DIM. C	DIM. D
ICA-083-S-X	A	8	.395 (10.03)	.300 (7.62)	.395 (10.03)	— —
ICA-143-S-X	A	14	.695 (17.65)	.300 (7.62)	.395 (10.03)	.400 (10.16)
ICA-163-S-X	A	16	.795 (20.19)	.300 (7.62)	.395 (10.03)	.500 (12.70)
ICA-183-S-X	A	18	.895 (22.73)	.300 (7.62)	.395 (10.03)	.600 (15.24)
ICA-203-S-X	A	20	.995 (25.27)	.300 (7.62)	.395 (10.03)	.700 (17.78)
ICA-224-S-X	A	22	1.095 (27.81)	.400 (10.16)	.495 (12.57)	.800 (20.32)
ICA-246-S-X	B	24	1.195 (30.35)	.600 (15.24)	.695 (17.65)	— —
ICA-286-S-X	B	28	1.395 (35.43)	.600 (15.24)	.695 (17.65)	— —
ICA-406-S-X	B	40	1.995 (50.67)	.600 (15.24)	.695 (17.65)	— —
ICA-426-S-X	B	42	2.095 (53.21)	.600 (15.24)	.695 (17.65)	— —

"X" denotes shell finish; (see materials below)



MATERIALS: (For applicable Mil Spec see Test Data Section.)

BODY: Black polyester, glass-filled
 CONTACTS: Beryllium copper
 SHELL: Brass

FINISH:

CONTACTS, Suffixes TG and GG: 10 μ inch (.254 μ m) min. gold over 50 μ inch (1.27 μ m) min. nickel
 Suffix TT: 200 μ inch (5.08 μ m) min. tin
 Suffixes T and G: 30 μ inch (.762 μ m) min. gold over 50 μ inch (1.27 μ m) min. nickel

SHELL, Suffixes TG, TT, and T: 200 μ inch (5.08 μ m) min. tin over 50 μ inch (1.27 μ m) min. nickel
 Suffixes GG and G: 10 μ inch (.254 μ m) min. gold over 50 μ inch (1.27 μ m) min. nickel

RATINGS:

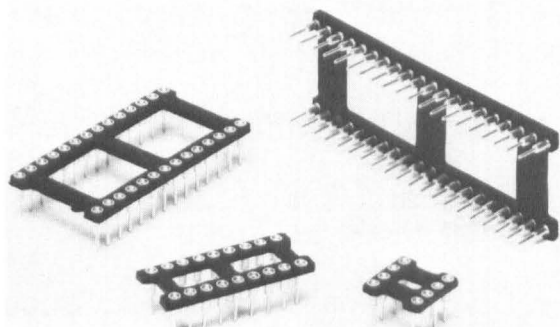
TEMPERATURE RANGE: -65°C to +150°C
 FLAMMABILITY: UL 94V-O

MOUNTING INFORMATION:

PCB HOLE: .035 \pm .002" (0.89 \pm 0.05)
 LOCATION: IC lead and socket leads are coincident.

PRODUCTION SOCKETS

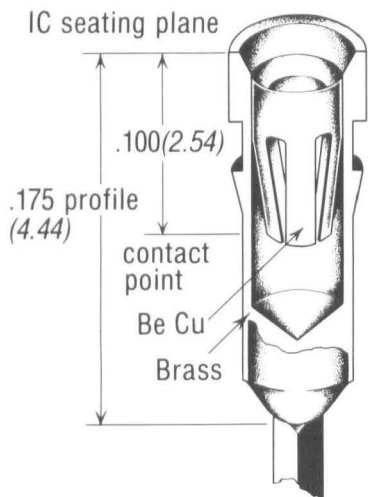
ICT SERIES, SOLDER DIP



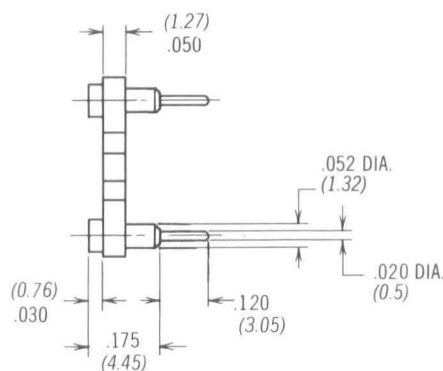
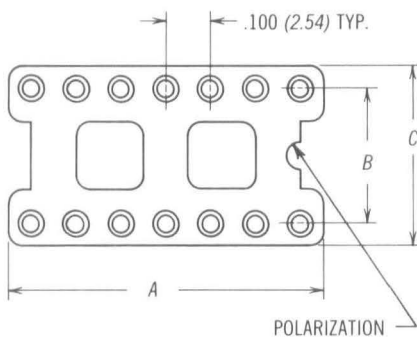
- Pin Socket Contacts for High Reliability and High Retention
- Free-standing Contacts Provide Excellent Convection Cooling
- Wafer Insures Pin Sockets Remain Properly Aligned for Insertion into PC Boards
- Four Finger BeCu Contact Accepts Short IC Leads

Part No.	No. of Contacts	DIM. A	DIM. B	DIM. C
ICT-083-S-X	8	.395 (10.03)	.300 (7.62)	.395 (10.03)
ICT-143-S-X	14	.695 (17.65)	.300 (7.62)	.395 (10.03)
ICT-163-S-X	16	.795 (20.19)	.300 (7.62)	.395 (10.03)
ICT-183-S-X	18	.895 (22.73)	.300 (7.62)	.395 (10.03)
ICT-203-S-X	20	.995 (25.27)	.300 (7.62)	.395 (10.03)
ICT-224-S-X	22	1.095 (27.81)	.400 (10.16)	.495 (12.57)
ICT-246-S-X	24	1.195 (30.35)	.600 (15.24)	.695 (17.65)
ICT-286-S-X	28	1.395 (35.43)	.600 (15.24)	.695 (17.65)
ICT-406-S-X	40	1.995 (50.67)	.600 (15.24)	.695 (17.65)

"X" denotes shell finish; (see materials below)



in. (mm)



MATERIALS: (For applicable Mil Spec see Test Data Section.)

BODY: Black nylon, glass-filled

CONTACTS: Beryllium copper

SHELL: Brass

FINISH:

CONTACTS, Suffixes TG and GG: 10 μ inch (.254 μ m) min. gold over
50 μ inch (1.27 μ m) min. nickel

Suffix TT: 200 μ inch (5.08 μ m) min. tin

Suffixes T and G: 30 μ inch (.762 μ m) min. gold over
50 μ inch (1.27 μ m) min. nickel

SHELL, Suffixes TG, TT, and T: 200 μ inch (5.08 μ m) min. tin over
50 μ inch (1.27 μ m) min. nickel

Suffixes GG and G: 10 μ inch (.254 μ m) min. gold
50 μ inch (1.27 μ m) min. nickel

RATINGS:

TEMPERATURE RANGE: -65°C to +150°C

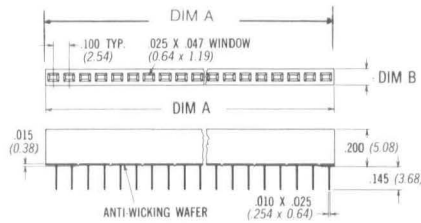
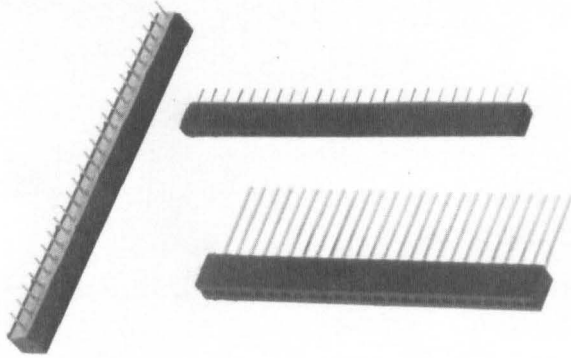
FLAMMABILITY: UL 94H-B

MOUNTING INFORMATION:

PCB HOLE: .035 \pm .002" (0.89 \pm 0.05)

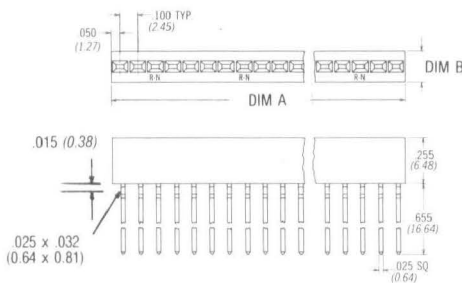
LOCATION: IC lead and socket leads are coincident.

STRIP SOCKETS, SOLDER DIP AND WIRE WRAP*



DETAIL A

in (mm)



DETAIL B

MATERIALS: (For applicable Mil Spec see Test Data section.)

BODY: Black polyester, glass-filled, or black nylon, glass-filled (see chart)

CONTACTS: Phosphor bronze, except WB is CA 725

CONTACT FINISH: Suffix TG, for SB-Products
Contact Area: 10 μ inch (.254 μ m) min. gold
over 50 μ inch (1.27 μ m) min. nickel

Terminal Area: 50 μ inch (1.27 μ m) min. electro tin
over 50 μ inch (1.27 μ m) min. nickel

Suffix G, 10 μ inch (0.254 μ m) min. gold
over 50 μ inch (1.27 μ m) min. nickel
on contacts, gold flash on terminals

Suffix T, for SB-Products
30 μ inch (.762 μ m) min. hot
tin dip and wipe

Suffix T, for WB Products
200 μ inch (5.08 μ m) min. tin

RATINGS:

TEMPERATURE RANGE: -65°C to +125°C
FLAMMABILITY: UL 94V-O

MOUNTING INFORMATION:

For SB-Products
PCB HOLE: .035 \pm .002" (0.89 \pm 0.05)
LOCATION: Socket leads are offset .026" (0.66)
from IC leads.

For WB-Products
PCB HOLE: .037 \pm .002" (0.94 \pm .05)
LOCATION: Socket leads are offset .018" (0.46)
from IC leads.

OTHER MATERIALS: Anti-Wicking Wafer, Nomex 410
(not provided on WB products)

- General Purpose High Reliability Strip Sockets
- Tin/Gold Plating Option Available
- Side and End Stackable in -100 Version
- SBF Series designed to accept flexible jumper strips

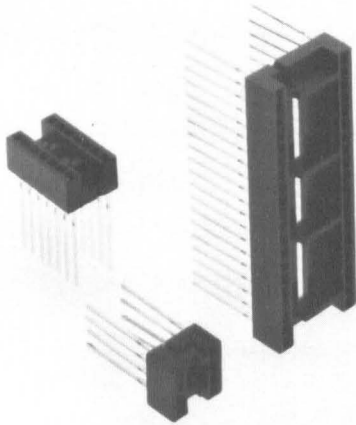
Part No.	Detail	DIM. A	DIM. B	Body Material	Max. Acc. Pin Size
SB-25-X	A	2.500 (63.5)	.175 (4.44)	Polyester	.015 (.381)
SB-25-100-X	A	2.500 (63.5)	.100 (2.54)	Nylon	.015 (.381)
SBF-25-100-X	A	2.500 (63.5)	.100 (2.54)	Nylon	.025 (.635)
WB-25-55-X	B	2.500 (63.5)	.175 (4.44)	Polyester	.015 (.381)

"X" denotes contact finish; Specify "TG" for tin/gold, "G" for gold, "T" for tin.
(BeCu Contacts available — see pg. 15 "Burn-In Strip Sockets".)

*Trademark of Gardner-Denver Co. Used Throughout Catalog

PRODUCTION SOCKETS

ICN SERIES, WIRE WRAP



- General Purpose High Reliability Wire Wrap Socket
- MIL-S-83734 Approved Version Available
- **RN** Side Wipe Contact Design
- Selective Gold Option Available
- Closed Entry Contacts
- Two or Three Level Wrap Option

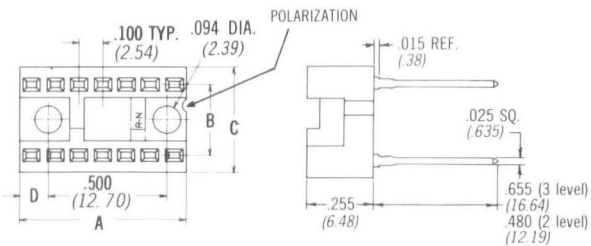
Part No.	Detail	No. of Contacts	DIM. A	DIM. B	DIM. C	DIM. D
ICN-083-WB-X	A	8	.395 (10.03)	.300 (7.62)	.440 (11.18)	.213 (5.41)
ICN-143-WB-X	A	14	.695 (17.65)	.300 (7.62)	.440 (11.18)	.113 (2.87)
ICN-163-WB-X	A	16	.795 (20.19)	.300 (7.62)	.440 (11.18)	.163 (4.14)
ICN-183-WB-X	A	18	.895 (22.73)	.300 (7.62)	.440 (11.18)	.213 (5.41)
ICN-203-WB-X	A	20	.995 (25.27)	.300 (7.62)	.440 (11.18)	.263 (6.68)
ICN-224-WB-X	B	22	1.095 (27.81)	.400 (10.16)	.540 (13.72)	—
ICN-246-WB-X	B	24	1.195 (30.35)	.600 (15.24)	.740 (18.80)	—
ICN-286-WB-X	B	28	1.395 (35.43)	.600 (15.24)	.740 (18.80)	—
ICN-406-WB-X	B	40	1.995 (50.67)	.600 (15.24)	.740 (18.80)	—

"X" denotes contact finish; specify "G" for gold, "T" for tin, SG for selective gold. Specify "MILG" for Military gold, "MILT" for Military tin

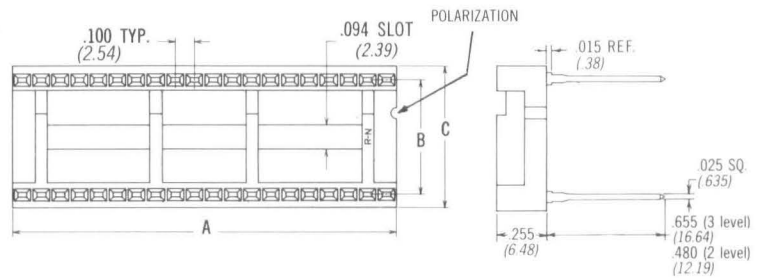
NOTE: Three level wrap shown, for two level wrap specify "WA" for "WB" in part number.

in. (mm)

DETAIL A



DETAIL B



MATERIALS: (For applicable Mil Spec see Test Data section.)

BODY: Black polyester, glass-filled

CONTACTS: CA 725; except MIL is phosphor bronze

CONTACT FINISH: Suffix G, 10 μ inch (.254 μ m) min. gold on contacts, gold flash on tails

Suffix T, 200 μ inch (5.08 μ m) min. tin

Suffix SG, 10 μ inch (.254 μ m) min. gold on contacts, tails unplated

Suffix MILG, 30 μ inch (.762 μ m) min. gold over 75 μ inch (1.91 μ m) min. nickel per MIL-S-83734

Suffix MILT, 180 μ inch (4.57 μ m) min. electro tin per MIL-S-83734

RATINGS:

TEMPERATURE RANGE: -65°C to +125°C

FLAMMABILITY: UL 94V-0

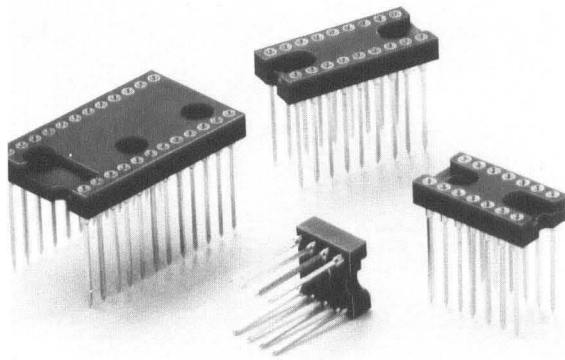
MOUNTING INFORMATION:

PCB HOLE: .037 \pm .002" (.94 \pm .05)

LOCATION: Socket leads are offset .018" (0.46) from IC leads.

TEST DATA: See Data Section at back of Catalog.

ICA SERIES, WIRE WRAP

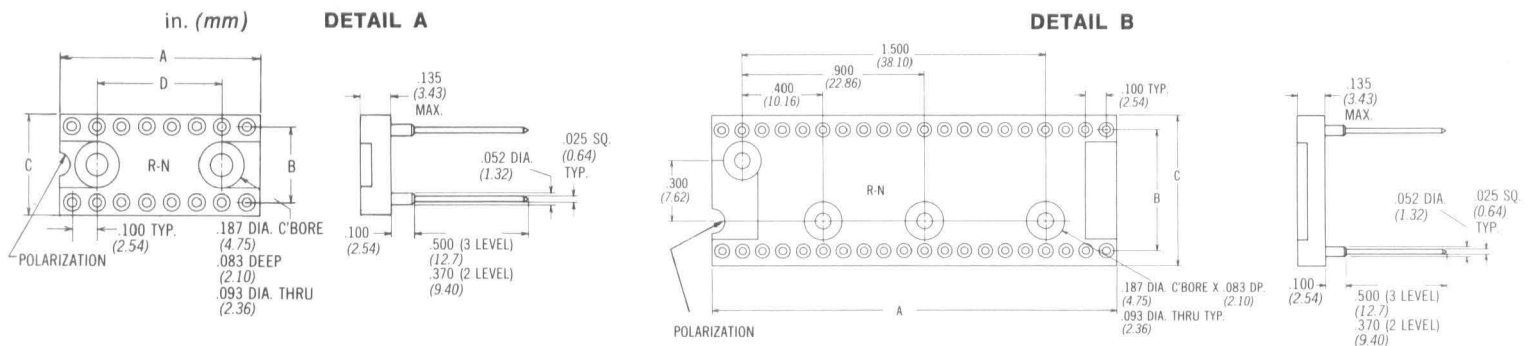


- Pin Socket Contacts for High Reliability and High Retention
- Low Profile Body with Mounting Holes Provided
- Low Cost Tin Plated Shell/Gold Contact Option Available
- Two or Three Level Wrap Option Available

Part No.	Detail	No. of Contacts	DIM. A	DIM. B	DIM. C	DIM. D
ICA-083-WB-X	A	8	.395 (10.03)	.300 (7.62)	.395 (10.03)	— —
ICA-143-WB-X	A	14	.695 (17.65)	.300 (7.62)	.395 (10.03)	.400 (10.16)
ICA-163-WB-X	A	16	.795 (20.19)	.300 (7.62)	.395 (10.03)	.500 (12.70)
ICA-183-WB-X	A	18	.895 (22.73)	.300 (7.62)	.395 (10.03)	.600 (15.24)
ICA-203-WB-X	A	20	.995 (25.27)	.300 (7.62)	.395 (10.03)	.700 (17.78)
ICA-224-WB-X	A	22	1.095 (27.81)	.400 (10.16)	.495 (12.57)	.800 (20.32)
ICA-246-WB-X	B	24	1.195 (30.35)	.600 (15.24)	.695 (17.65)	— —
ICA-286-WB-X	B	28	1.395 (35.43)	.600 (15.24)	.695 (17.65)	— —
ICA-406-WB-X	B	40	1.995 (50.67)	.600 (15.24)	.695 (17.65)	— —
ICA-426-WB-X	B	42	2.095 (53.21)	.600 (15.24)	.695 (17.65)	— —

"X" denotes shell finish; (see materials below)

NOTE: Three level wrap shown, for two level wrap specify "WA" for "WB" in part number.



MATERIALS: (For applicable Mil Spec see Test Data section.)

- BODY:** Black polyester, glass-filled
- CONTACTS:** Beryllium copper
- CONTACT FINISH:** 30 μ inch (0.762 μ m) min. gold
over 50 μ inch (1.27 μ m) min. nickel
- SHELL:** Brass
- SHELL FINISH:** Suffix G, 10 μ inch (0.254 μ m) min. gold
over 50 μ inch (1.27 μ m) min. nickel
Suffix T, 200 μ inch (5.08 μ m) min. tin
over 50 μ inch (1.27 μ m) min. nickel

RATINGS:

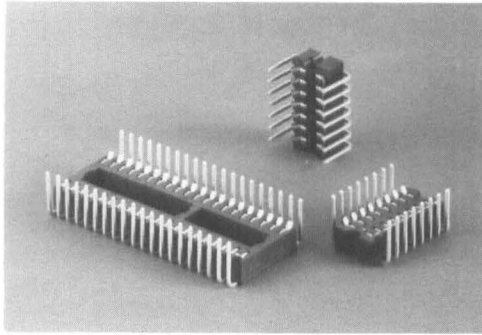
- TEMPERATURE RANGE:** -65°C to +150°C
- FLAMMABILITY:** UL 94V-0

MOUNTING INFORMATION:

- PCB HOLE:** .055 \pm .002" (1.40 \pm .05)
- LOCATION:** IC lead and socket leads are coincident.

PRODUCTION SOCKETS

AS SERIES, WIRE WRAP



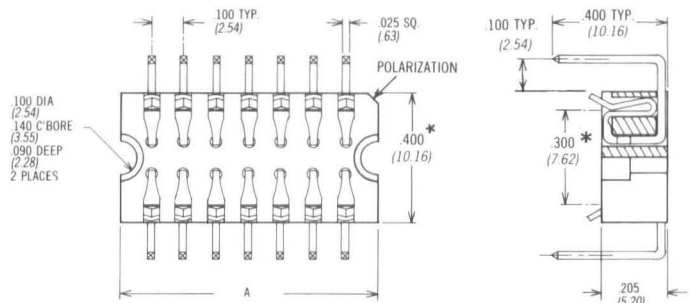
- **RN AOK Wire Wrap Contacts**
Design for Maximum Retention
- **Ideal for Prototype Wiring and High Density Production Applications**

Part No.	Detail	No. of Contacts	DIM. A
AS-143-U3-X	A	14	.790 (20.06)
AS-163-U3-X	A	16	.890 (22.61)
AS-203-U3-X	A	20	1.090 (27.69)
AS-224-U3-X	A	22	1.190 (30.23)
AS-246-U3-X	B	24	1.200 (30.48)
AS-286-U3-X	B	28	1.400 (35.56)
AS-406-U3-X	B	40	2.000 (50.80)

"X" denotes contact finish; specify "G" for gold, "T" for tin (see materials below)

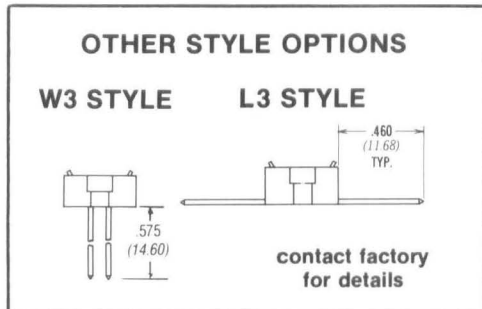
in. (mm)

DETAIL A

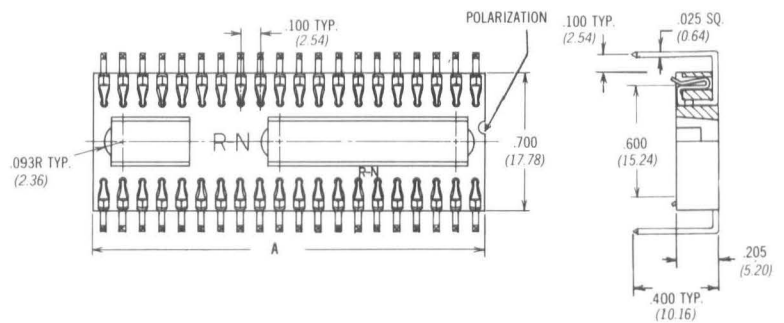


* Note: 22 pin is .500 (12.70)

* Note: 22 pin is .400 (10.16)



DETAIL B



MATERIALS: (For applicable Mil Spec see Test Data section.)

BODY: Black nylon, glass-filled
 CONTACTS: Beryllium copper
 CONTACT FINISH: Suffix G, 10 μ inch (.254 μ m) min. gold over 50 μ inch (1.27 μ m) min. nickel
 Suffix T, 200 μ inch (5.08 μ m) min. tin over copper strike

RATINGS:

TEMPERATURE RANGE: -65°C to +150°C
 FLAMMABILITY: UL 94H-B

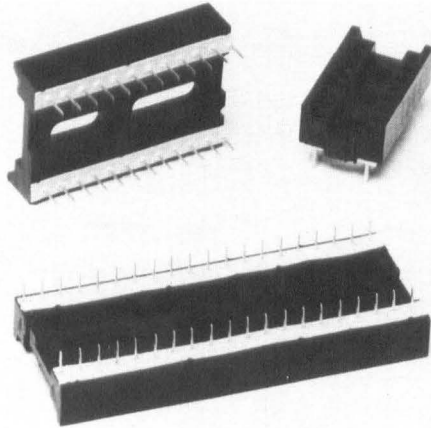
MOUNTING INFORMATION:

MOUNTING SCREWS: (Note: screws are available from RN)
 14 and 16 lead sockets require .076" PCB hole to accept #2 fillister-head self-tapping screw. Order Part No. 0504784.
 24, 28, and 40 lead sockets require .120" PCB hole to accept #4 fillister-head screw and nut.

TEST DATA:

See Data Section at back of Catalog.

ICN/S2 SERIES, SOLDER DIP



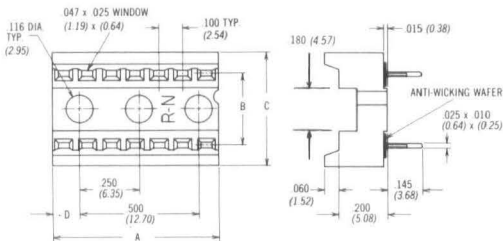
- BeCu Contacts for Long Life
- Lowest Cost Burn-in Socket
- Center Channel to Speed Unloading with "DIPPER" Sword
- HI-TEMP (220°C) Option Available

Part No.	Detail	No. of Contacts	DIM. A	DIM. B	DIM. C	DIM. D
ICN-083-S2	A	8	.395 (10.03)	.300 (7.62)	.475 (12.06)	— —
ICN-143-S2	A	14	.695 (17.65)	.300 (7.62)	.475 (12.06)	.116 (2.95)
ICN-163-S2	A	16	.795 (20.19)	.300 (7.62)	.475 (12.06)	.166 (4.22)
ICN-183-S2	A	18	.895 (22.73)	.300 (7.62)	.475 (12.06)	.216 (5.49)
ICN-203-S2	A	20	.995 (25.27)	.300 (7.62)	.475 (12.06)	.266 (6.76)
ICN-224-S2	A	22	1.095 (27.81)	.400 (10.16)	.575 (14.60)	— —
ICN-246-S2	B	24	1.195 (30.35)	.600 (15.24)	.775 (19.68)	— —
ICN-286-S2	B	28	1.395 (35.43)	.600 (15.24)	.775 (19.68)	— —
ICN-406-S2	B	40	1.995 (50.67)	.600 (15.24)	.775 (19.68)	— —

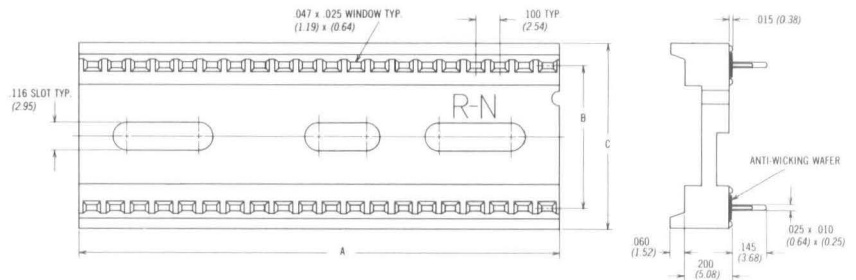
NOTE: To order HI-TEMP option, add "-HT" suffix to part number. HT identified by scribe mark on body.

in. (mm)

DETAIL A



DETAIL B



MATERIALS: (For applicable Mil Spec see Test Data section.)

BODY: Brown polyphenylene sulfide, glass-filled, Ryton.

CONTACTS: STD, Beryllium copper
HT, Beryllium nickel

CONTACT FINISH: STD, 10 μ inch (.254 μ m) min. gold
over 50 μ inch (1.27 μ m) avg. nickel
on contacts, gold flash on terminals
HT, 30 μ inch (.762 μ m) min. gold
over 75 μ inch (1.90 μ m) avg. nickel

OTHER MATERIALS: Anti-Wicking Wafer, Nomex 410

RATINGS:

TEMPERATURE RANGE: STD, -65°C to +150°C
HT, -65°C to +220°C

FLAMMABILITY: UL 94V-0

MOUNTING INFORMATION:

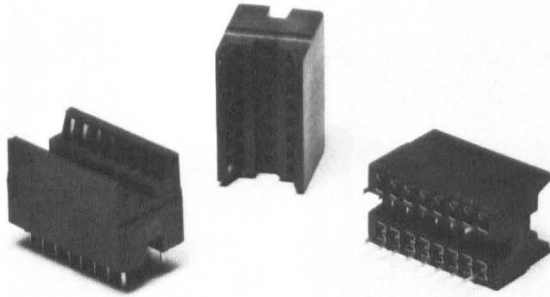
PCB HOLE: .035 \pm .002" (0.89 \pm 0.05)

LOCATION: Socket leads are offset .026" (0.66) from IC leads.

TEST DATA: See Data Section at back of Catalog.

BURN-IN, TEST SOCKETS

TSN SERIES, BURN-IN SOCKET

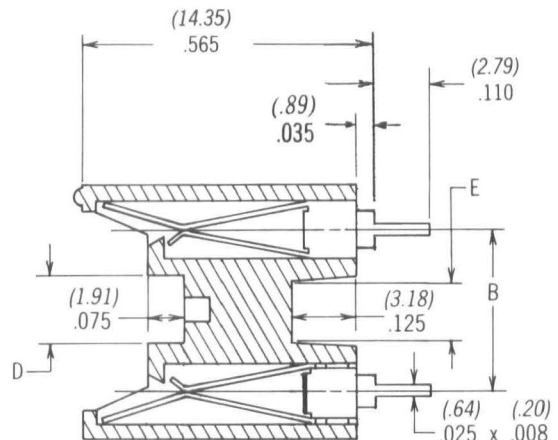
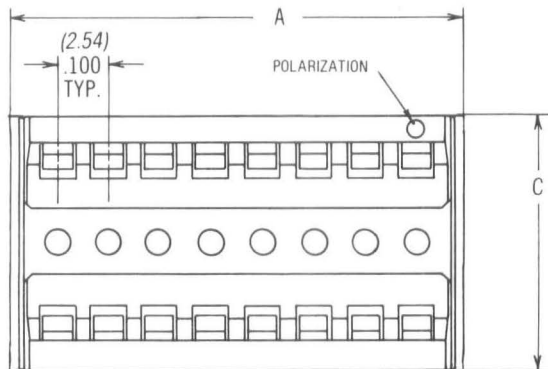


- Low Insertion Force Burn-in Socket
- Narrowest Design Available
- Hi-Temp (200°C) Version Available
- Special Design Channel to Speed IC Unloading
- Bottom Channel provided for resistor or capacitor mounting

Part No.	No. of Contacts	DIM. A	DIM. B	DIM. C	DIM. D	DIM. E
TSN-143	14	.795 (20.19)	.300 (7.62)	.495 (12.53)	.125 (3.18)	.107 (2.72)
TSN-163	16	.830 (21.08)	.300 (7.62)	.495 (12.53)	.125 (3.18)	.107 (2.72)
TSN-183	18	.930 (23.62)	.300 (7.62)	.495 (12.53)	.125 (3.18)	.107 (2.72)
TSN-203	20	1.095 (27.81)	.300 (7.62)	.495 (12.53)	.125 (3.18)	.107 (2.72)
TSN-224	22	1.195 (30.35)	.400 (10.16)	.595 (15.11)	.125 (3.18)	.107 (2.72)
TSN-246	24	1.295 (32.89)	.600 (15.24)	.795 (20.19)	.425 (10.80)	.407 (10.34)
TSN-286	28	1.495 (37.97)	.600 (15.24)	.795 (20.19)	.425 (10.80)	.407 (10.34)
TSN-406	40	2.095 (53.21)	.600 (15.24)	.795 (20.19)	.425 (10.80)	.407 (10.34)

NOTE: To order HI-TEMP option, add "-HT" suffix to part number. HT identified by scribe mark on body.

in. (mm)



MATERIALS:

BODY: Brown polyphenylene sulfide, glass-filled, Ryton.

CONTACTS: STD, Beryllium copper
HT, Beryllium nickel

CONTACT FINISH: STD, 10 μ inch (.254 μ m) min. gold
over 50 μ inch (1.27 μ m) nickel
on contacts, gold flash on terminals

HT, 30 μ inch (.762 μ m) min. gold
over 75 μ inch (1.90 μ m) min. nickel

RATINGS:

TEMPERATURE RANGE: STD, -65°C to +150°C
HT, -65°C to +200°C

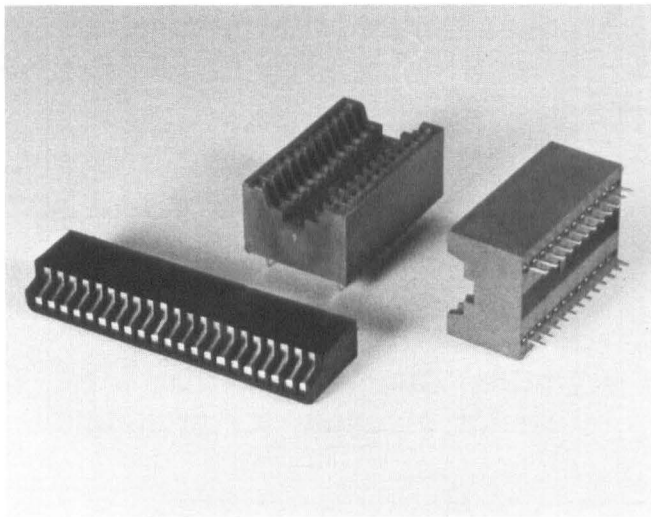
FLAMMABILITY: UL 94V-0

MOUNTING INFORMATION:

PCB HOLE: .035 \pm .002" (0.89 \pm 0.05)

LOCATION: IC lead and socket leads are coincident

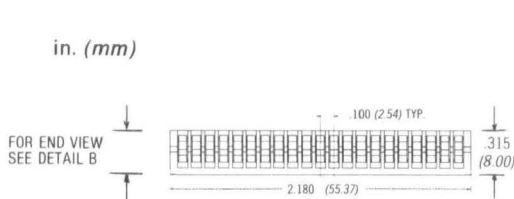
TS SERIES



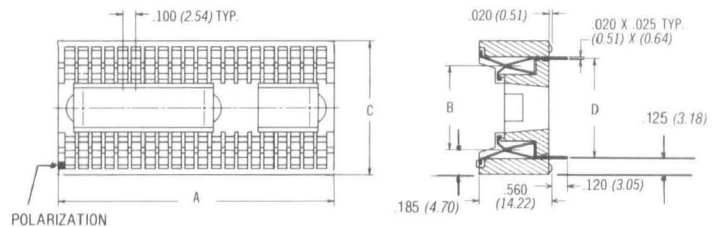
- Contact Designed for Very Low Insertion Force and Long Life
- Excellent for Testing, Burn-in, and Programming PROMs
- TS-21 Strip Sockets can be cut to shorter length
- HI-TEMP (220°C) Option Available

Part No.	No. of Contacts	Detail	DIM. A	DIM. B	DIM. C	DIM. D
TS-21	21	A	—	—	—	—
TS-31014	14	B	.780 (19.81)	.300 (7.62)	.700 (17.78)	.450 (11.43)
TS-31016	16	B	.880 (22.35)	.300 (7.62)	.700 (17.78)	.450 (11.43)
TS-31018	18	B	.980 (24.89)	.300 (7.62)	.700 (17.78)	.450 (11.43)
TS-41022	22	B	1.180 (29.97)	.400 (10.16)	.800 (20.32)	.550 (13.97)
TS-41024	24	B	1.280 (32.51)	.400 (10.16)	.800 (20.32)	.550 (13.97)
TS-61024	24	B	1.253 (31.83)	.600 (15.24)	1.000 (25.40)	.750 (19.05)
TS-61028	28	B	1.453 (36.91)	.600 (15.24)	1.000 (25.40)	.750 (19.05)
TS-61040	40	B	2.080 (52.83)	.600 (15.24)	1.000 (25.40)	.750 (19.05)

Note: To order HI-TEMP option, add "-HT" suffix to part number. HT identified by scribe mark on body.



DETAIL A



DETAIL B

MATERIALS: (For application Mil Spec see Test Data section.)

BODY: Brown polyphenylene sulfide, glass-filled, Ryton.

CONTACTS: STD, Beryllium copper
HT, Beryllium nickel

CONTACT FINISH: STD, 10 μ inch (.254 μ m) min. gold
over 50 μ inch (1.27 μ m) nickel
on contacts, gold flash on terminals

HT, 30 μ inch (.762 μ m) min. gold
over 75 μ inch (1.90 μ m) min. nickel

RATINGS:

TEMPERATURE RANGE: STD, -65°C to +150°C
HT, -65°C to +220°C

FLAMMABILITY: UL 94V-O

MOUNTING INFORMATION:

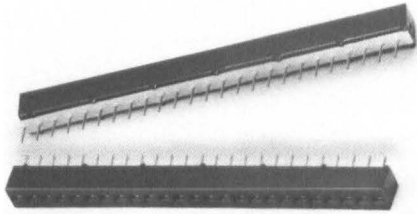
PCB HOLE: .035 \pm .002" (0.89 \pm 0.05)

TEST DATA:

See Data Section at back of Catalog

BURN-IN, TEST SOCKETS

SB SERIES, STRIP SOCKET



- Can cut Standard 25 position to shorter lengths
- SBF Series will accept up to .025" diameter pin
- Hi-Temp 200°C

MATERIAL:

BODY: Brown polyphenylene sulfide, glass-filled, UL 94V-O; or Black glass-filled polyester; or Black glass-filled nylon (see chart)

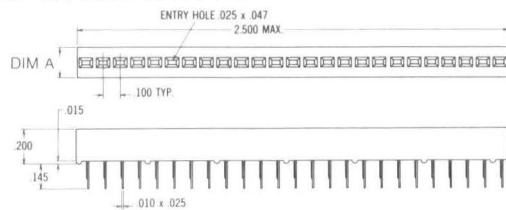
CONTACT: Standard — Beryllium Copper
Hi Temp (HT) — Beryllium Nickel

FINISH: STD — 10 μ inch (.254 μ m) min. gold, over 50 μ inch (1.27 μ m) min. nickel

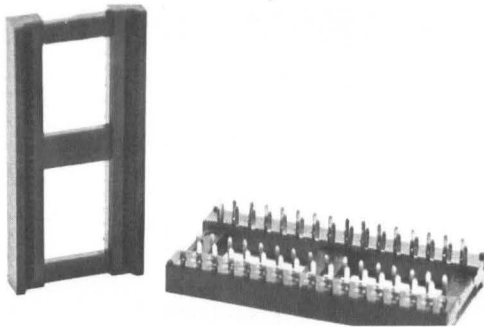
HT — 30 μ inch (.762 μ m) min. gold, over 75 μ inch (1.950 μ m) min. nickel

Part No.	DIM. A	Body Mat.	Max. Accept. Pin Dia.
SB-25B-G	.175 (4.44)	Polyester	.015 (.381)
SB-25B-100-G	.100 (2.54)	Nylon	.015 (.381)
SBF-25B-100-G	.100 (2.54)	Nylon	.025 (.635)
SB-25-HT	.175 (4.44)	Ryton	.015 (.381)

NOTE: -100 versions are side and end stackable.



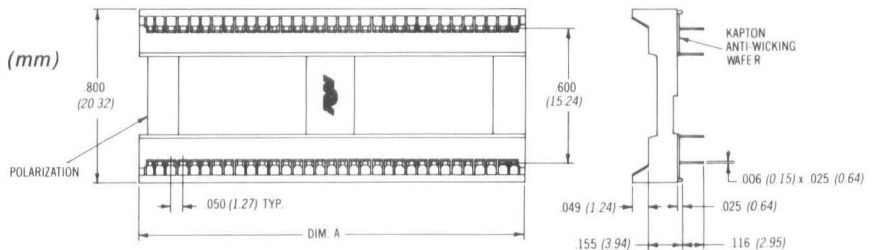
ICD SERIES, SOLDER DIP FOR 50 MIL IC'S



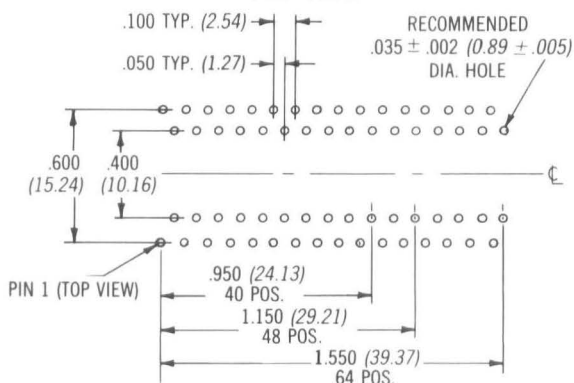
- Designed to accept ICs with .050" Lead-to-Lead Spacing
- Available in 40, 48 and 64 Position
- High Compression GAS-TIGHT Contact Design with Anti-Overstress Feature
- Staggered 0.1" Mounting Pattern

Part No.	No. of Contacts	DIM. A
ICD-406-S7-X	40	1.095 (27.81)
ICD-486-S7-X	48	1.295 (32.89)
ICD-646-S7-X	64	1.695 (43.05)

in. (mm)



TYP. MOUNTING HOLE PATTERN TOP VIEW



MATERIALS:

BODY: Black polyester

CONTACTS: Beryllium copper

CONTACT FINISH: Suffix G, 10 μ inch (.254 μ m) min. Gold over 50 μ inch (1.27 μ m) nickel

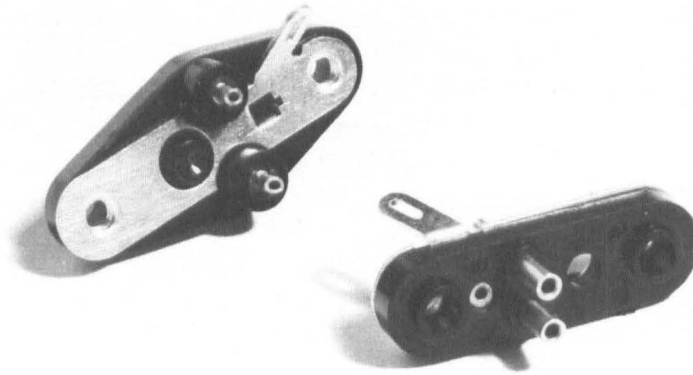
CONTACT FINISH: Suffix T, 200 μ inch (5.08 μ m) min. Tin/Low Lead Electroplated

RATINGS:

TEMPERATURE RANGE: -65°C to +125°C

FLAMMABILITY: UL-94V-O

BURN-IN SOCKET, TO-3 & TO-66



• 300°C Burn-In Rating

MATERIALS: (For applicable Mil Spec see Test Data Section).

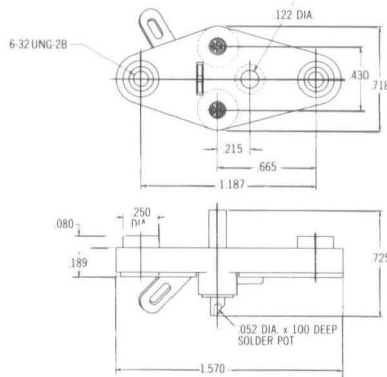
BODY: Gray Silicone, glass-filled

CONTACTS: Stainless steel.

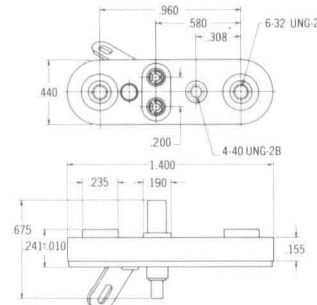
SHELL AND STRAP: Brass.

FINISH: SOCKET: 50 μ inch gold over 100 μ inch nickel.

STRAP: 200 μ inch tin.



TO-3 Part No. 0001890



TO-66 Part No. 0001535

TO PATTERN TEST SOCKET 3, 4, 8, 10 leads

Designed specifically for test and burn-in applications of 8 and 10 lead TO-5 Can ICs. Good to 160°C.

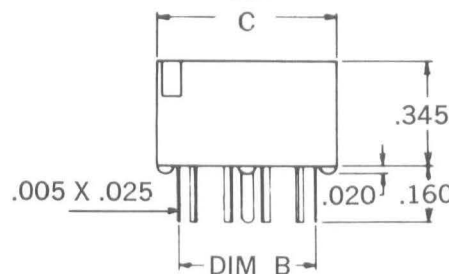
Deep, funnel-entries guide IC leads into double-leaf, gold over nickel plated beryllium copper contacts.

Insertion/withdrawal forces are uniformly low but consistent with best electrical contact.

Accepts IC leads .016" to .022" diameter x .140" long.

CENTER stabilizing stud .070" dia. by .150" long out bottom of socket supports socket body and prevents strain or breakage of terminals; allows for a variety of optional mounting methods.

HI-TEMP versions use glass-filled polyphenylene sulfide bodies, and beryllium-nickel contacts permitting continuous, or cycling, operating service temperatures to 220°C. max. on a long-term basis. To specify the high-temp version of any TS-series socket, add the suffix "-HT" to the basic standard socket number.



Part No.	A	B	C	No. of Leads
TS-5173	.200	.350	.437	3
TS-5174	.200	.350	.437	4
TS-5178-2	.200	.350	.480	8
TS-51710-23	.230	.380	.480	10

MATERIAL (STANDARD)

Body — Glass-filled polyphenylene sulfide.
Contacts — Beryllium copper 10 μ inch gold over 75 μ inch nickel.

HI-TEMP

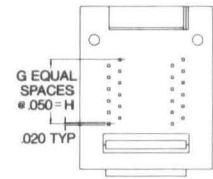
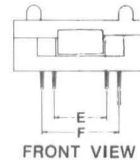
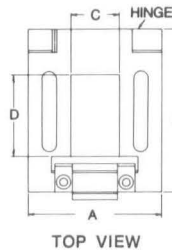
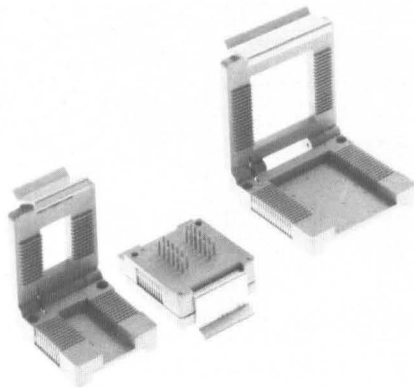
Body — Glass-filled polyphenylene sulfide.
Contacts — Full — Spring — Temper beryllium nickel.

Finish — Nickel plate 75 μ inch min.; gold plate 30 μ inch min.

Test data — see test section.

BURN-IN, TEST SOCKETS

FP SERIES, FLAT PAK SOCKETS



TERMINAL PATTERN BOTTOM VIEW

MATERIAL:

BODY AND LID: Glass-filled polysulfone good to 160°C.

CONTACTS: Beryllium copper.

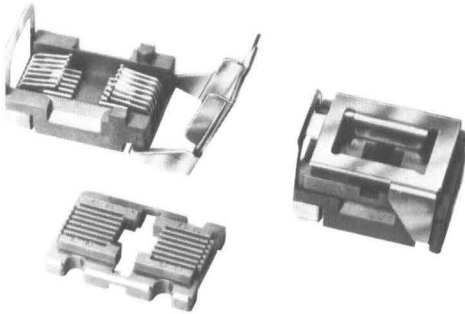
FINISH:

CONTACTS: 10 μ inch min. gold.
over 75 μ inch min. nickel.

Part No.	No. of Leads	Max. Pkg.	A	B	C	D	E	F	G	H	No. Sides Loaded
FP-3324	24	3/8 x 3/8	1.150	1.400	.420	.703	.305	.505	11	.550	2
FP-3336	36	1.000 sq.	1.765	1.762	1.037	1.062	.922	1.122	17	.850	2
FP-3344	44	1.150 sq.	1.918	2.275	1.190	1.190	1.075	1.275	21	1.050	2
FP-3364	64	1.150 sq.	1.918	2.275	1.190	1.190	1.075	1.275	21	1.050	3
FP-3384	84	1.150 sq.	1.918	2.275	1.190	1.190	1.075	1.275	19	.950	4

Contact Factory for mounting hole pattern.

FP SERIES, FLAT PAK SOCKETS REQUIRING CARRIERS



Socket design provides fast, one-hand "load-lock" operation (and reverse) in the minimum overall socket area and height.

Glass-filled Diallyl Phthalate body and all other materials used are the finest available insuring vastly extended socket life in environmental test or heat aging applications up to 160°C.

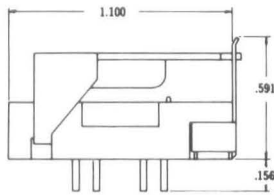
Beryllium copper contacts provide gentle wiping action and will not deform leads or damage plating.

Stainless steel cap firmly supports carriers over its entire area and insures consistent contact with all IC leads.

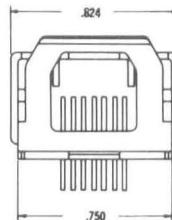
Beryllium copper lock-clip provides fast uniform pressure at each locking cycle.

NOTE IC Carriers are not supplied with any FP-Series socket EXCEPT when specifically ordered. Refer to carrier chart below if carriers are required.

Part #FP-3314 Illustrated with Carrier #0504197 see DETAIL A

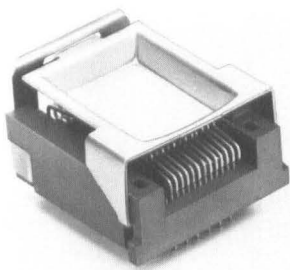


Part No. FP-3314
DETAIL A

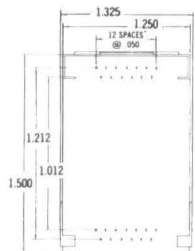


Part No.	No. of Contacts	Package Size	Carrier Size	Detail
FP-3314	14	(10 thru 14 leads) 1/4" x 3/8"	3/4"x1"	A
FP-3316	16	1/4" x 3/8"	3/4"x1"	A
FP-3326	26	1/2" x 5/8"	1 1/4"x1 1/4"	B

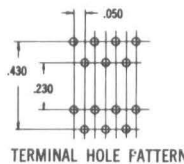
No. of Leads	Carrier Part No.
14	0504197
16	0503940
26	0504196



Part No. FP-3326
see DETAIL B



Part No. FP-3326
DETAIL B



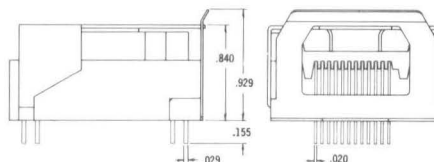
MATERIALS

Body — Glass-filled diallyl phthalate good to 160° C.

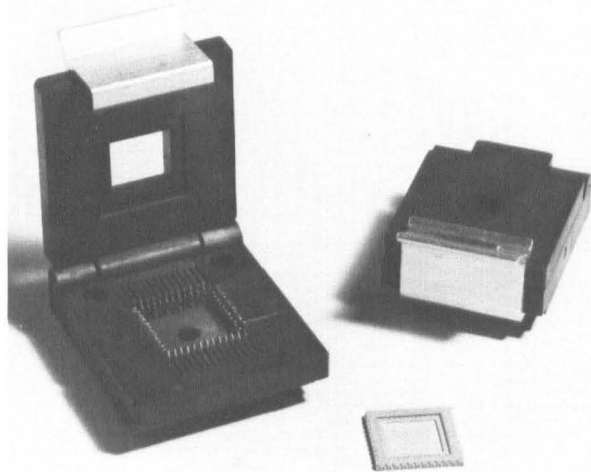
Contacts — Beryllium copper, 10 μ inch min. gold, over 75 μ inch min. nickel.

Cap — Stainless steel.

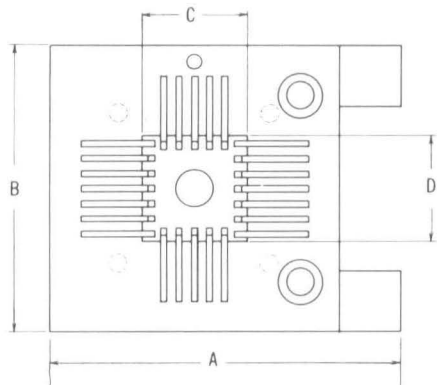
Clip — Beryllium copper, nickel plated.



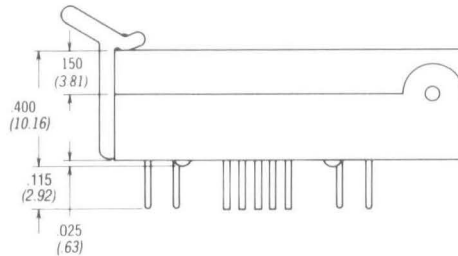
LCS SERIES, LEADLESS IC SOCKET



- 19 configurations available including 6 JEDEC styles
- For Burn-in & Testing of ICs mounted in Leadless Chip Carriers
- Rugged Body and Contacts for Long Life
- Zero Insertion Force to Protect IC from Breakage
- HI-TEMP (220°C) Option Available



TOP VIEW SHOWN WITH LID REMOVED



SIDE VIEW

MATERIALS: (For applicable Mil Spec see Test Data section.)

BODY: Brown polyphenylene sulfide, glass-filled, Ryton.

CONTACTS: STD, Beryllium copper
HT, Beryllium nickel

CONTACT FINISH: STD, 10 μ in. (.254 μ m) min. gold
over 50 μ in. (1.27 μ m) min. nickel
HT, 30 μ in. (.762 μ m) min. gold
over 75 μ in. (1.90 μ m) min. nickel

RATINGS:

TEMPERATURE RANGE: STD -65°C to +150°C
HT -65°C to +220°C

FLAMMABILITY: UL 94V-0

MOUNTING INFORMATION:

Contact factory for mounting hole pattern.

BURN-IN, TEST SOCKETS

LCS SERIES, LEADLESS IC SOCKET

PRODUCTS AVAILABLE

Part No.	No. of Contacts	Package Size LxWxH	Contact Spacing	A	B	C	D
LCS-99116	16	.180x.180x.045	.040	1.200 (30.48)	1.000 (25.40)	.220 (5.59)	.220 (5.59)
LCS-99018	18	.250x.250x.045	.050	1.200 (30.48)	1.000 (25.40)	.275 (6.99)	.275 (6.99)
LCS-99118	18	.285x.350x.045	.050	1.200 (30.48)	1.000 (25.40)	.310 (7.87)	.375 (9.52)
LCS-99020	20	.330x.330x.055	.040	1.200 (30.48)	1.000 (25.40)	.355 (9.02)	.355 (9.02)
LCS-99022	22	.340x.375x.045	.050	1.200 (30.48)	1.000 (25.40)	.365 (9.27)	.400 (10.16)
LCS-99024	24	.400x.400x.045	.050	1.200 (30.48)	1.000 (25.40)	.425 (10.80)	.425 (10.80)
LCS-99124	24	.335x.335x.045	.050	1.200 (30.48)	1.000 (25.40)	.360 (9.14)	.360 (9.14)
JEDEC LCS-99J24	24	.350x.350x.055	.040	1.200 (30.48)	1.000 (25.40)	.375 (9.52)	.375 (9.52)
LCS-99028	28	.400x.400x.045	.050	1.400 (35.56)	1.200 (30.48)	.425 (10.80)	.425 (10.80)
JEDEC LCS-99J32	32	.420x.420x.055	.040	1.400 (35.56)	1.200 (30.48)	.445 (11.31)	.445 (11.31)
LCS-99036	36	.400x.400x.045	.040	1.400 (35.56)	1.200 (30.48)	.425 (10.80)	.425 (10.80)
LCS-99040	40	.430x.460x.045	.040	1.400 (35.56)	1.200 (30.48)	.455 (11.56)	.485 (12.32)
JEDEC LCS-99J40	40	.480x.480x.055	.040	1.400 (35.56)	1.200 (30.48)	.505 (12.83)	.505 (12.83)
LCS-99048	48	.500x.500x.045	.040	1.400 (35.56)	1.200 (30.48)	.525 (13.34)	.525 (13.34)
JEDEC LCS-99J48	48	.560x.560x.055	.040	1.400 (35.56)	1.200 (30.48)	.585 (14.86)	.585 (14.86)
LCS-99064	64	.670x.700x.045	.040	1.600 (40.64)	1.400 (35.56)	.695 (17.65)	.725 (18.42)
LCS-99164	64	.700x.700x.045	.040	1.600 (40.64)	1.400 (35.56)	.725 (18.42)	.725 (18.42)
JEDEC LCS-99J64	64	.720x.720x.065	.040	1.600 (40.64)	1.400 (35.56)	.745 (18.93)	.745 (18.93)
JEDEC LCS-99J84	84	.920x.920x.065	.040	1.800 (45.72)	1.600 (40.64)	.945 (24.01)	.945 (24.01)

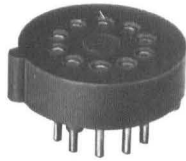
NOTE: To order HI-TEMP option, add "-HT" suffix to part number.
HT identified by scribe mark on body.

NOW AVAILABLE

New 68 position
Production Socket.

Contact factory for complete details.

SD SERIES, PC MOUNT SOCKETS



Smallest, high quality TO-5 production type IC socket available. .150" max. above PC board height.

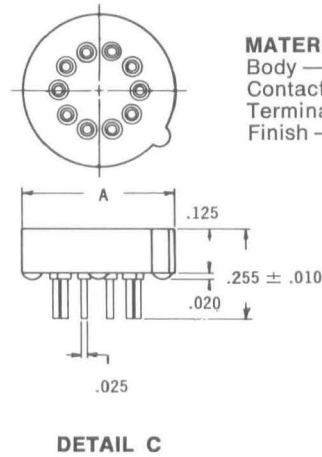
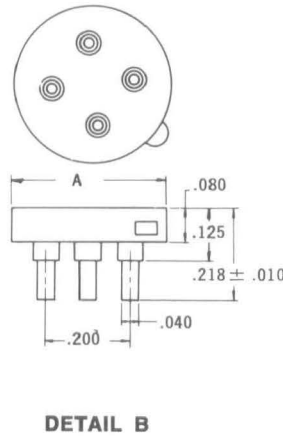
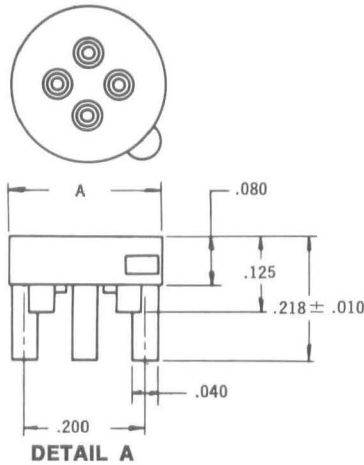
Accepts 3 through 10 lead ICs; also dual transistors and TO-5 can relays.

Precision-machined shells for 4-fingered contacts are molded directly into DAP body; will not loosen while soldering; best possible electrical insulation. Closed ends on terminals prevent solder "wicking".

Accepts lead diameters from .015"-.020" and lengths .090"-.120".

Beryllium copper contacts assure high reliability and long life—thousands of insertion/withdrawal cycles; excellent retention of IC under extreme vibration or shock conditions.

Part Number	No. of Contacts	Contact Circle Dia.	Contact Pattern	TO Outline	Detail	A
SD-5173	3	.200		TO-5	B	.370
SD-18173	3	.100		TO-18	A	.281
SD-5174	4	.200		TO-5	B	.370
SD-18174	4	.100		TO-46	A	.281
SD-5178	8	.200		TO-5	C	.370
SD-5178-10-23	8	.230		TO-100	C	.430
SD-51710-23	10	.230		TO-100	C	.430



MATERIALS
 Body — Diallyl Phthalate
 Contacts — Beryllium Copper, 4 leaf
 Terminals — Brass
 Finish — Contact Area:
 30 μ inch gold
 Terminal Area:
 10 μ inch gold

SD/N SERIES, LOW COST PRODUCTION SOCKETS



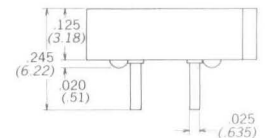
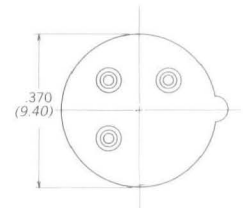
- Low Cost, Low Profile
- BeCu Contacts for high quality

Part No.	No. of Contact	Contact Circle Dia.	Contact Pattern	TO Outline
SD-5173-N	3	.200		TO-5
SD-5174-N	4	.200		TO-5
SD-5178-N	8	.200		TO-5

MATERIALS

Body — Glass filled nylon
 Contacts — Beryllium Copper
 Terminal — Brass

Finish
 Contacts — 30 μ inch Gold
 Terminal — 200 μ inch Bright Acid Tin



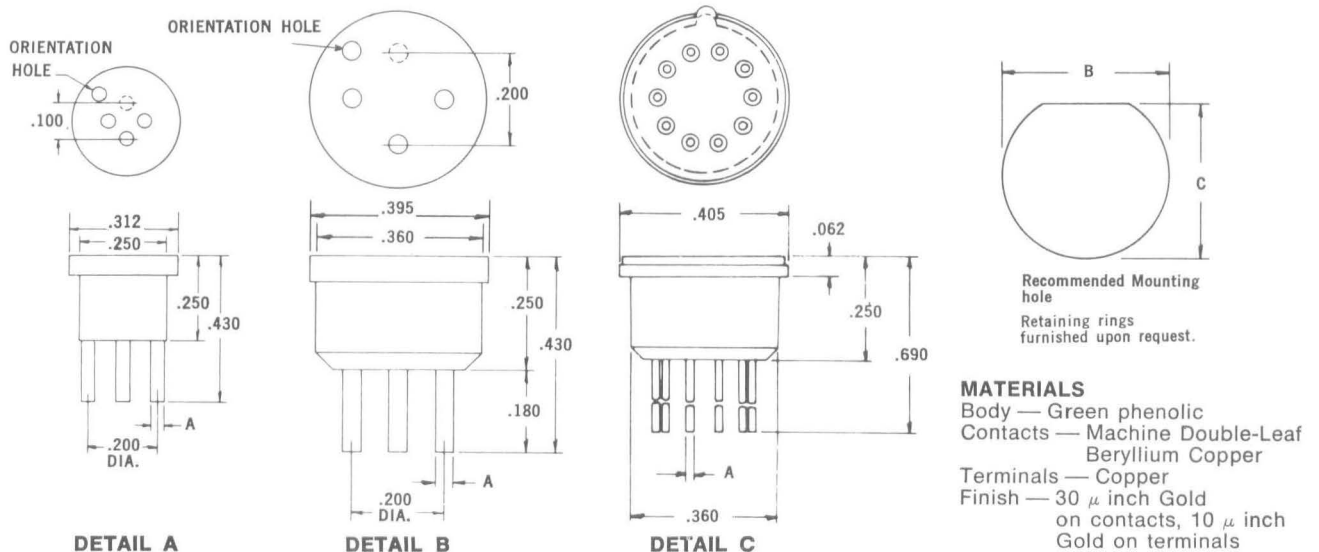
DP SERIES, CHASSIS MOUNT SOCKETS



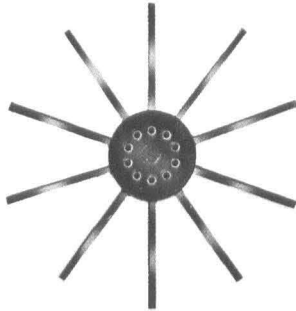
- Designed for Chassis Mounting
- Closed entry BeCu Contacts accepts .015-.020" dia leads, .125-190" long
- Flexible copper leads (DP products) can be bent, flexed, or cut as desired; 1.75" lead length option available

Part No.	No. of Contacts	Contact Circle Dia.	Contact Pattern	TO Outline	Detail	Mounting		
						A	B	C
18-32	3	.100		TO-18	A	.040	.252	.232
18-33	3	.100		TO-18	A	.020	.252	.232
18-42	4	.100		TO-46	A	.040	.252	.232
18-43	4	.100		TO-46	A	.020	.252	.232
MP-5173	3	.200		TO-5	B	.040	.363	.338
MP-5174	4	.200		TO-5	B	.040	.363	.338
DP-5178-A	8	.200		TO-5	C	.020	.363	.363
DP-5178-10-A	8	.200		TO-5	C	.020	.363	.363
DP-51710-2-A	10	.200		TO-5	C	.020	.363	.363
DP-51710-T-2-A	10	.200		* TO-5	C	.020	.363	.363
DP-51710-23-A	10	.230		TO-100	C	.020	.363	.363
DP-51710-T-23-A	10	.230		* TO-100	C	.020	.363	.363

Note: On DP Products, for 1.750" lead length specify "-B" for "-A" in part number.
 *Note: On Parts with -T suffix, -T indicates tab on pin number 1.



LP, TP SERIES, RADIAL LEAD SOCKETS



Highly flexible; unique configuration. Terminations fan-out radially from flange allowing ease of terminating.

Excellent for high frequency applications. The RN Radial Lead design maintains the shortest lead length between device and termination and the most effective terminal isolation producing very low lead-to-lead capacitance.

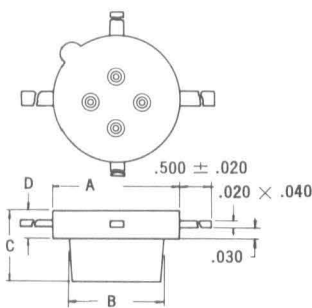
Terminals, 1/2" long, may be bent, twisted or cut for any mounting method; strong enough to support socket body in any position.

Contacts are 4-leaf, open-end, self cleaning type, allowing IC leads to pass through socket body and bend over to terminations for absolute retention.

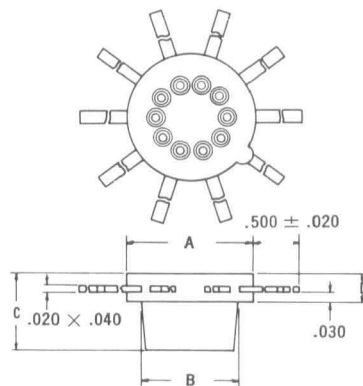
Beryllium copper contacts assure high reliability and long life—thousands of insertion / withdrawal cycles; excellent retention of IC under extreme vibration or shock conditions.

TP Series is essentially the same as LP Series except for addition of threads molded into the body allowing direct chassis mounting. Mounting nut is furnished. This extends the basic flexibility of the LP Series to many additional applications.

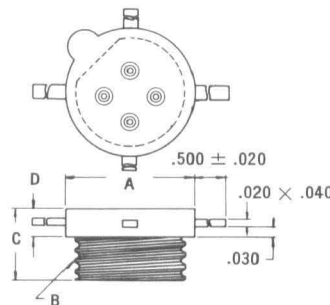
Part Number	No. of Contacts	Contact Cir. Dia.	Contact Pattern	TO Outline	Detail	A	B	C	D	Mounting E	F
LP-18173	3	.100		TO-18	A	.250	.187	.210	.080	—	—
TP-18173	3	.100		TO-18	C	.250	7/32-32	.237	.080	.220	.200
LP-5173	3	.200		TO-5	A	.375	.280	.210	.080	—	—
TP-5173	3	.200		TO-5	C	.375	5/16-32	.237	.080	.314	.294
LP-5403	3	.200		TO-60	A	.406	.312	.210	.080	—	—
LP-18174	4	.100		TO-46	A	.250	.187	.210	.080	—	—
TP-18174	4	.100		TO-46	C	.250	7/32-32	.237	.080	.220	.200
LP-5174	4	.200		TO-5	A	.375	.280	.210	.080	—	—
TP-5174	4	.200		TO-5	C	.375	5/16-32	.237	.080	.314	.294
LP-5178	8	.200		TO-5	B	.375	.280	.210	.080	—	—
TP-5178	8	.200		TO-5	D	.375	5/16-32	.237	.080	.314	.294
LP-5178-10	8	.200		TO-5	B	.375	.280	.230	.080	—	—
TP-5178-10	8	.200		TO-5	D	.375	5/16-32	.247	.080	.314	.294
LP-51710-2	10	.200		TO-5	B	.375	.280	.230	.080	—	—
TP-51710-2	10	.200		TO-5	D	.375	5/16-32	.247	.080	.314	.294
LP-51710-23	10	.230		TO-100	B	.405	.312	.230	.090	—	—
TP-51710-23	10	.230		TO-100	D	.405	1 1/32-32	.247	.090	.345	.325



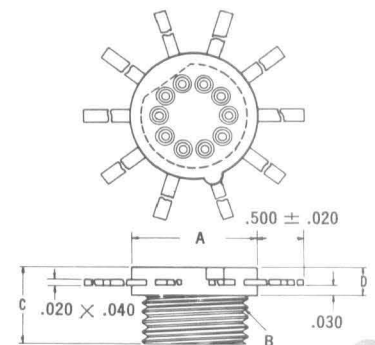
DETAIL A



DETAIL B



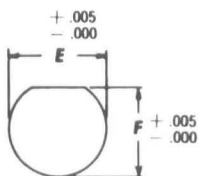
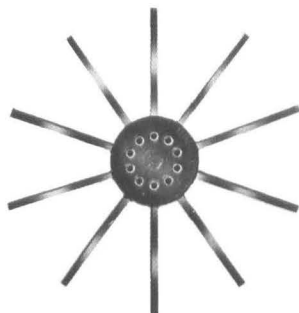
DETAIL C



DETAIL D

TO PATTERN SOCKETS

LP, TP SERIES, RADIAL LEAD SOCKETS (continued)

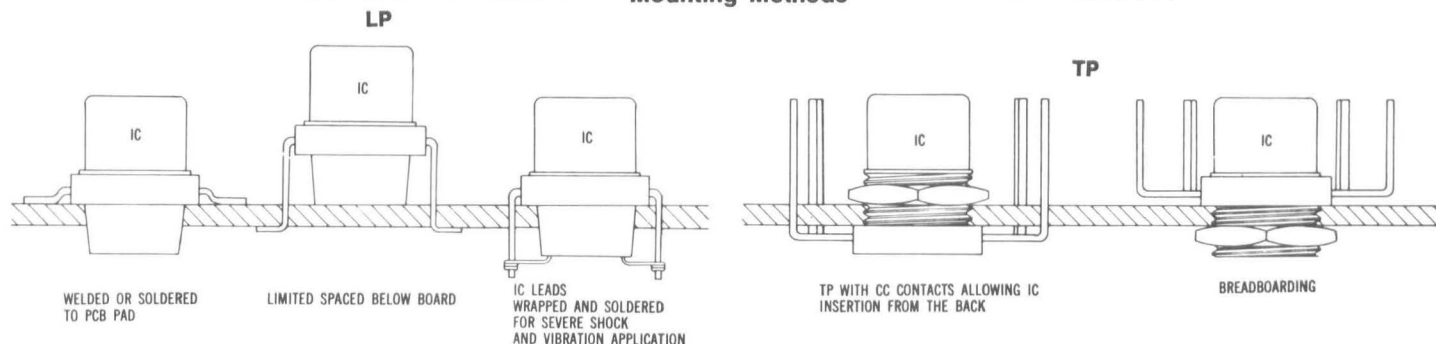


Recommended Mounting Hole
For TP Series

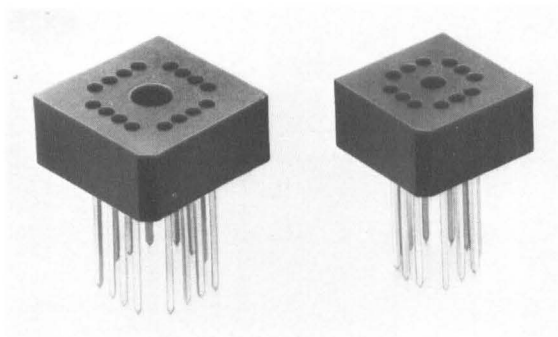
MATERIALS

Molded Body — Glass-filled phenolic
Contacts — Beryllium copper, 4-leaf
Terminals — 1/2 hard brass
Finish — 30 μ inch gold
on contacts, 10 μ inch gold
on terminals

Mounting Methods



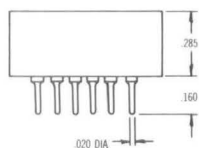
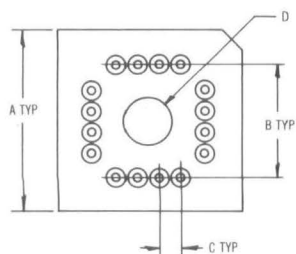
SQUARE TO-8 SOCKETS



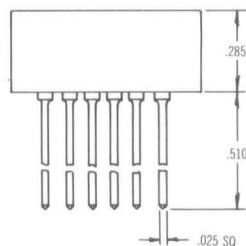
Good to 150°C for all 12 & 16 Lead Square-TO-8's with .075" or .100" Terminal spacing.
Choice of Wirewrap or Solder Terminals accepts lead length of .120" min.

Part No.*	No. of Contacts	A	B	C	D
MP-12075-X	12	.550	.300	.075	.105
MP-12100-X	12	.650	.400	.100	.168
MP-16075-X	16	.650	.400	.075	.168
MP-16100-X	16	.750	.500	.100	.230

* Specify Suffix "W" for Wirewrap Terminal; "S" for Solder.



S



W

MATERIALS

Body — Black Nylon Glass Filled
Contact — BeCu
Shell — Brass

FINISH

Terminals — 10 μ gold over
50 μ inch nickel
Contacts — 30 μ inch gold over
75 μ inch nickel

TO-3, TO-66, POWER TRANSISTOR SOCKETS

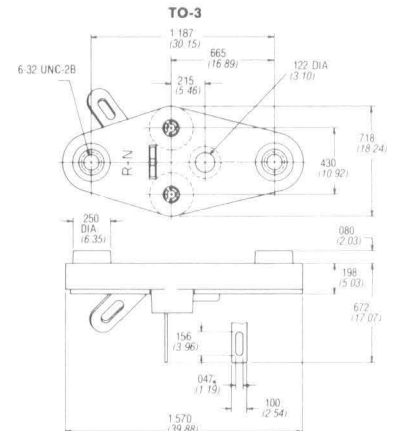


- Standard 10 amp rated units or high power 30 amp rated units available.
- Gold or tin-plated contacts accept all standard lead diameters.
- Choice of one or two ground-strap terminals
- Contacts will not wick solder; terminals provide wiring capability.
- Choice of glass-filled, diallyl-phthalate or phenolic bodies.
- For full details see Test Spec. Data Section.

in. (mm)

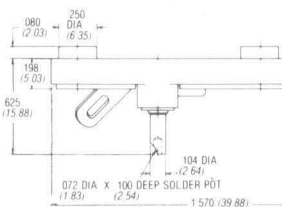
Part No.	Case	Detail	No. of Lugs	Contact Plating	Contact Material	Body Material	Current Rating	Acceptable Pin Dia.
MD-3452-G	TO-3	A	1	Gold	BeCu	Diallyl Phthalate	10 amps	.040 or .060*
MP-3452-G	TO-3	A	1	Gold	BeCu	Phenolic	10 amps	.040 or .060
MP-3452-ST	TO-3	E	NA	Tin	Brass	Phenolic	10 amps	.040
MP-3452-T	TO-3	A	1	Tin	Brass	Phenolic	10 amps	.040 or .060
HP-3452-T	TO-3	B	1	Tin	BeCu	Phenolic	30 amps	.040
HP-3453-T	TO-3	C	1	Tin	BeCu	Phenolic	30 amps	.040
HP-3454-T	TO-3	B	1	Tin	BeCu	Phenolic	30 amps	.060
HP-3455-T	TO-3	C	1	Tin	BeCu	Phenolic	30 amps	.060
MD-66302-1G	TO-66	D	1	Gold	BeCu	Diallyl Phthalate	10 amps	.040 or .060
MP-66302-1G	TO-66	D	1	Gold	BeCu	Phenolic	10 amps	.040 or .060
MP-66302-1T	TO-66	D	1	Tin	Brass	Phenolic	10 amps	.040 or .060
MP-66302-2G	TO-66	D	2	Gold	BeCu	Phenolic	10 amps	.040 or .060
MP-66302-2T	TO-66	D	2	Tin	Brass	Phenolic	10 amps	.040 or .060

*NOTE: Socket will accept either pin, but not both in same socket.

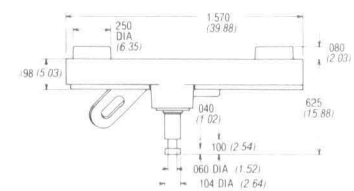


DETAIL A

in. (mm)



DETAIL B



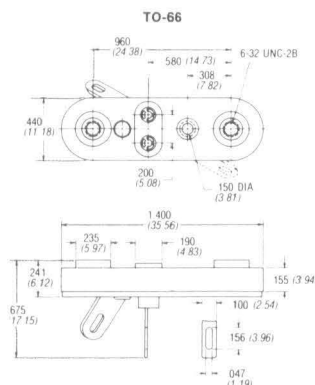
DETAIL C

MATERIALS

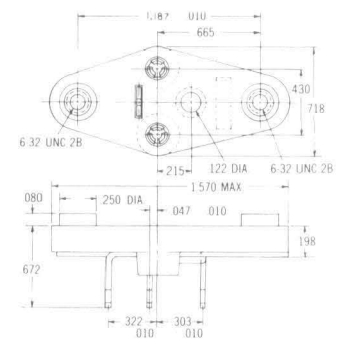
Standard 10 amp units
 Body — Glass filled Diallyl Phthalate or Phenolic
 Contact — BeCu or Brass
 Ground Strap — Brass
 Finish
 Contact — 30 μ inch gold plate or 200 μ inch tin
 Ground Strap — 200 μ inch tin plate

MATERIALS

High Power 30 amp units
 Body — Phenolic — Black
 Contact — BeCu
 Shell — Brass
 Ground Strap — C R Steel
 Finish
 Contact, Shell and Ground Strap — 200 μ inch tin plate



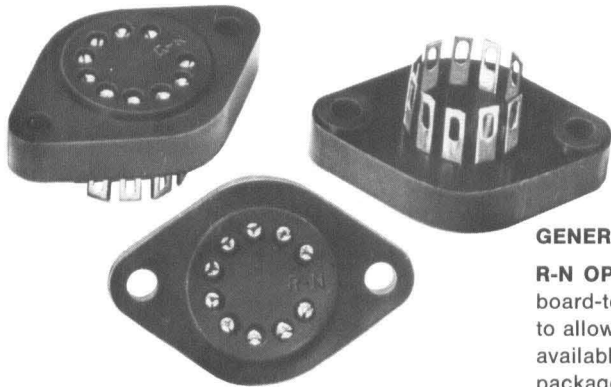
DETAIL D



DETAIL E

TO PATTERN SOCKETS

OP-AMP SOCKETS, TO-3 TYPES



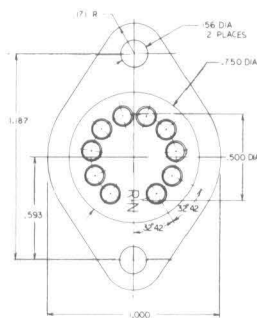
FEATURES

- 8-pin and 10-pin versions for TO-3 OP-AMPS!
- Low above-board profile at very lowest cost!
- Handle high operating powers with ease!
- Mounting holes provided in socket body molding!

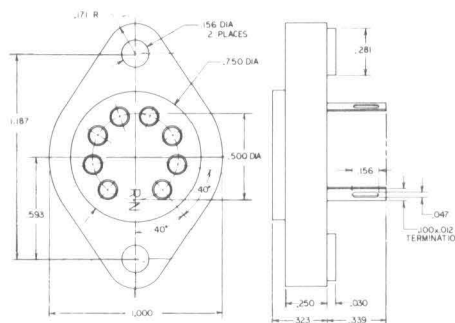
GENERAL DESCRIPTION

R-N OP-AMP Sockets are designed to provide low overall board height for dense board-to-board packaging of Op-Amps at low cost, while also providing the ability to allow high power operation and incorporate heat sinks if desired. They are available in 8-on-9 and 10-on-11 contact configurations to accommodate all TO-3 package styles. Each OP-AMP socket is provided with holes for mounting with #6 fillister-headed self-tapping screws.

PART NO. 0002240
10-on-11



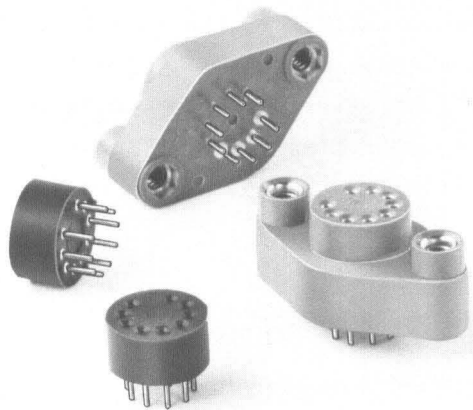
PART NO. 0002011
8-on-9



MATERIALS:

BODY — Glass-filled diallyl phthalate
CONTACTS — Beryllium copper
FINISH — 10 μ inch gold, over
 50 μ inch nickel
TEMP. RATING — 150°C

VOLTAGE REGULATOR SOCKET, 9 PIN TO-66



For Motorola IC-Driven Regulators

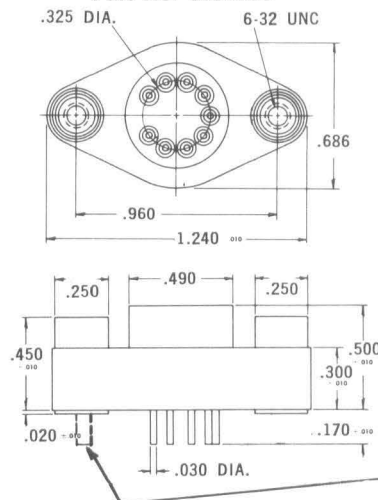
#MC-1460 & 61 R Suffix #MC-1560 & 61 R Suffix

Suitable for use as a test or packaging socket with or without heatsink.

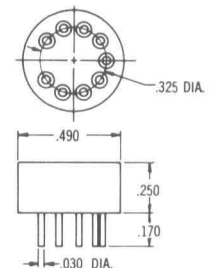
Contact shells are securely pressed into the socket body. Contacts accept the full length and diameter range of the regulator lead.

Threaded bushings in mounting ears allow for any method/combination of mounting the socket, regulator and heatsink.

Part No. 0001306



Part No. 0001782



MATERIALS FOR 0001306

Body — Green glass-filled polyester
Contacts — Beryllium-copper
Terminals — Brass, 1/2 hard
Threaded Bushings — Brass

FINISH:

Contacts — 30 μ inch gold, over
 75 μ inch nickel
Terminals — 10 μ inch gold, over
 50 μ inch nickel
Bushings — 200 μ inch nickel

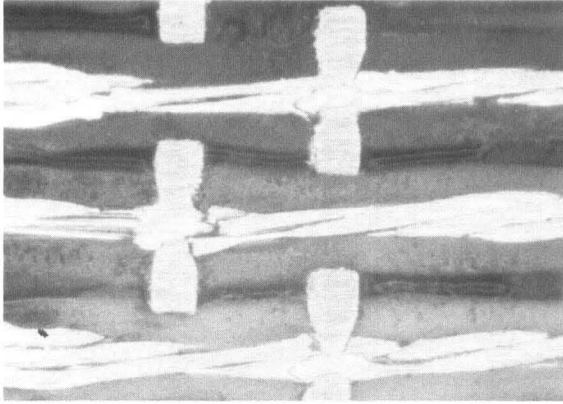
MATERIALS FOR 0001782

Body — Nylon
Contacts — Phosphor bronze
Finish — 30 μ inch gold, over
 75 μ inch nickel

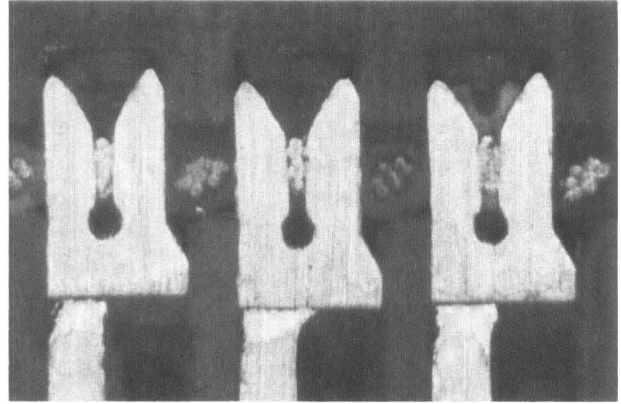
For dip solder pin (.030 DIA. x .150 Long, shown in dotted lines) exiting below 6-32 mounting-hole, specify (Part No. 0001587).

INSULATION DISPLACEMENT CONNECTORS

MICRO PHOTOS SHOW RN QUALITY FEATURES



IDS Top Section View



IDS End Section View

Contact Pressure

This photo shows the concentrated force due to the reduced surface area on the piercing contact where it engages the wire.

Spring Force

The contact has full material strength and thickness in the piercing legs. The beryllium copper material provides excellent spring characteristics.

Insulation Piercing

The photo shows that adjacent conductors are unaffected and leave full insulation due to slot entry and piercing tip design.

Staggered Contacts

The spacing and shape of the contact legs provides maximum contact strength while preventing accidental shorting of adjacent conductors.

Contact Area

The photo above dramatically portrays the effectiveness of the RN slot design on the piercing contact. Note the tightness of the contact/wire interface as well as the number of wires that engage the contact.

Slot Design with Stress-relieving Cut-out

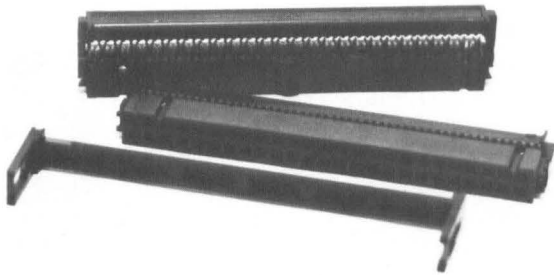
This RN design allows several benefits:

1. Parallel and uniform force on the wire
2. No sharp stress points, so stress concentration is eliminated
3. Tapered entry in conjunction with reduced contact area preserves strand integrity while providing maximum normal force on the strands.

Lid and Body Design (not visible)

You can see the perfect positioning of the conductors in the slot — not too high, not too low. The RN design of lid and body guarantees optimum wire placement in the slot every time connector is properly assembled.

IDS 'K' SERIES, SOCKET CONNECTORS



- Keying Conforms to MIL-C-83503
- IDS-PK Provides Complete Polarization When Mated to IDH-PK or IDH-LP
- Single Piece Body Construction For Easy Assembly
- Optional Strain Relief Available
- Beryllium Copper Contacts

K-SERIES SOCKET CONNECTOR PART NUMBERS

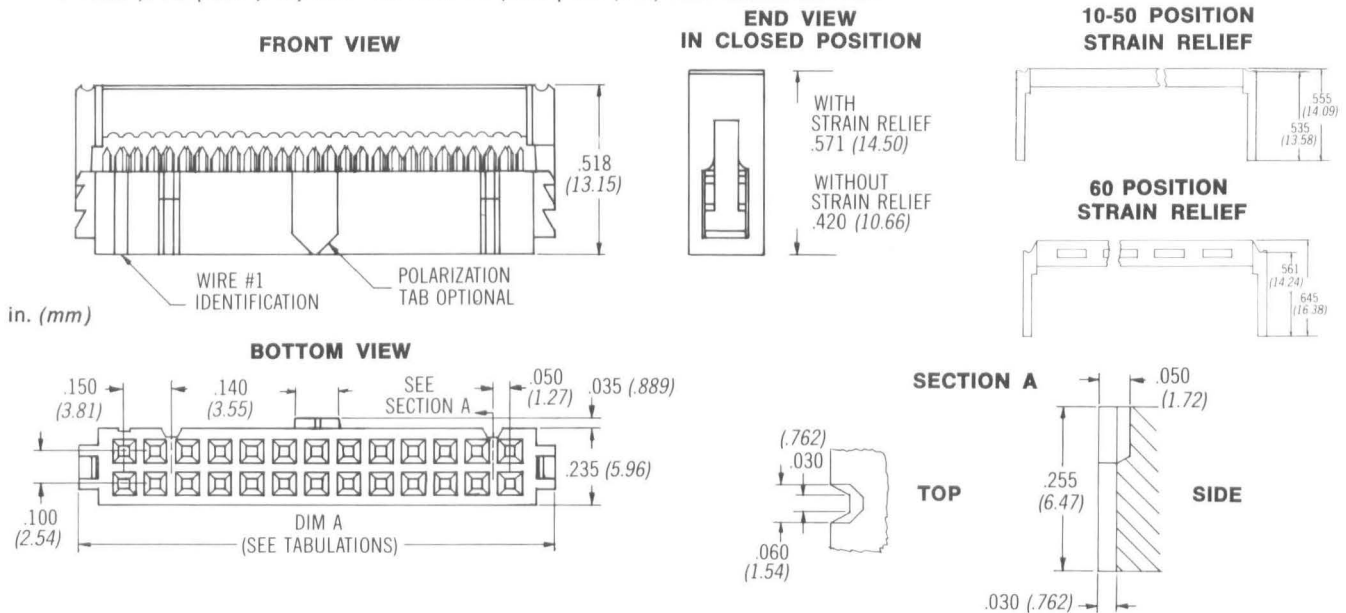
With/ Polarization Tab	Without/ Polarization Tab	With/ Polarization Tab and Strain Relief	Without/ Polarization Tab with Strain Relief	Strain Relief Only	No. of Contacts	DIM. A Inches (mm)
IDS-10PK-X	IDS-10NPK-X	IDS-10PK-SR-X	IDS-10NPK-SR-X	SR-10K	10	.680 (17.27)
IDS-14PK-X	IDS-14NPK-X	IDS-14PK-SR-X	IDS-14NPK-SR-X	SR-14K	14	.880 (22.35)
IDS-16PK-X	IDS-16NPK-X	IDS-16PK-SR-X	IDS-16NPK-SR-X	SR-16K	16	.980 (24.89)
IDS-20PK-X	IDS-20NPK-X	IDS-20PK-SR-X	IDS-20NPK-SR-X	SR-20K	20	1.180 (29.97)
IDS-26PK-X	IDS-26NPK-X	IDS-26PK-SR-X	IDS-26NPK-SR-X	SR-26K	26	1.480 (37.59)
IDS-34PK-X	IDS-34NPK-X	IDS-34PK-SR-X	IDS-34NPK-SR-X	SR-34K	34	1.880 (47.75)
IDS-40PK-X	IDS-40NPK-X	IDS-40PK-SR-X	IDS-40NPK-SR-X	SR-40K	40	2.180 (55.37)
IDS-50PK-X	IDS-50NPK-X	IDS-50PK-SR-X	IDS-50NPK-SR-X	SR-50K	50	2.680 (68.07)
IDS-60PK-X	IDS-60NPK-X	IDS-60PK-SR-X	IDS-60NPK-SR-X	SR-60K	60	3.180 (80.77)

Suffix X — Denotes plating options

G = 10 μ in. (.254 μ m) min. Gold over 50 μ in. (1.27 μ m) min. Nickel all over.

G30 = 30 μ in. (.762 μ m) min. Gold over 50 μ in. (1.27 μ m) min. Nickel all over.

T = 200 μ in. (5.08 μ m) min. Tin over 50 μ in. (1.27 μ m) min. Nickel all over.



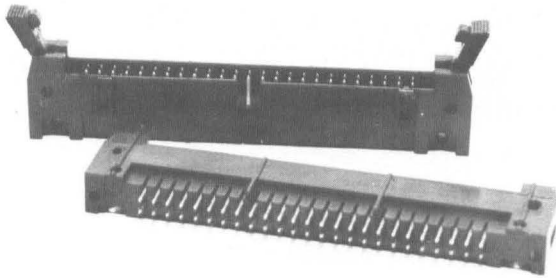
MATERIALS:

BODY, LID AND STRAIN RELIEF: Glass Filled Polyester, Black
 CONTACTS: Beryllium Copper

RATINGS:

TEMP. RANGE: -65°C to +125°C
 FLAMMABILITY: UL-94V-O

IDH 'K' SERIES, FULLY SHROUDED HEADERS



- Keying Conforms to MIL-C-83503
- IDH-PK Provides Complete Polarization When Mated With IDS-PK
- Rounded Pins For Easier Insertion to PC Board
- Optional Ejector Latches
- Stand-Offs For Easier Flux Removal
- .025 Square Pins For Mating Area

K-SERIES — HEADERS STRAIGHT AND RIGHT ANGLE PART NUMBERS

For .062" PCB Straight	For .125" PCB Straight	For .062" PCB Right Angle	For .125" PCB Right Angle	Straight Wire-Wrap	Right Angle Wire-Wrap	No. of Pins	DIM. A Inches (mm)
IDH-10PK-S3-X	IDH-10PK-S4-X	IDH-10PK-SR3-X	IDH-10PK-SR4-X	IDH-10PK-W-X	IDH-10PK-WR-X	10	1.260 (32.00)
IDH-14PK-S3-X	IDH-14PK-S4-X	IDH-14PK-SR3-X	IDH-14PK-SR4-X	IDH-14PK-W-X	IDH-14PK-WR-X	14	1.460 (37.08)
IDH-16PK-S3-X	IDH-16PK-S4-X	IDH-16PK-SR3-X	IDH-16PK-SR4-X	IDH-16PK-W-X	IDH-16PK-WR-X	16	1.560 (39.62)
IDH-20PK-S3-X	IDH-20PK-S4-X	IDH-20PK-SR3-X	IDH-20PK-SR4-X	IDH-20PK-W-X	IDH-20PK-WR-X	20	1.760 (44.70)
IDH-26PK-S3-X	IDH-26PK-S4-X	IDH-26PK-SR3-X	IDH-26PK-SR4-X	IDH-26PK-W-X	IDH-26PK-WR-X	26	2.060 (52.32)
IDH-34PK-S3-X	IDH-34PK-S4-X	IDH-34PK-SR3-X	IDH-34PK-SR4-X	IDH-34PK-W-X	IDH-34PK-WR-X	34	2.460 (62.48)
IDH-40PK-S3-X	IDH-40PK-S4-X	IDH-40PK-SR3-X	IDH-40PK-SR4-X	IDH-40PK-W-X	IDH-40PK-WR-X	40	2.760 (70.10)
IDH-50PK-S3-X	IDH-50PK-S4-X	IDH-50PK-SR3-X	IDH-50PK-SR4-X	IDH-50PK-W-X	IDH-50PK-WR-X	50	3.260 (82.80)
IDH-60PK-S3-X	IDH-60PK-S4-X	IDH-60PK-SR3-X	IDH-60PK-SR4-X	IDH-60PK-W-X	IDH-60PK-WR-X	60	3.760 (95.50)

Suffix X — Denotes plating options

TG = 10 μ in. (.254 μ m) min. Gold over 50 μ in. (1.27 μ m) min. Nickel on mating area, 200 μ in. (5.08 μ m) min. Tin over 50 μ in. (1.27 μ m) min. Nickel on Terminal area.

TG30 = 30 μ in. (.254 μ m) min. Gold over 50 μ in. (1.27 μ m) min. Nickel on mating area, 200 μ in. (5.08 μ m) min. Tin over 50 μ in. (1.27 μ m) min. Nickel on Terminal area.

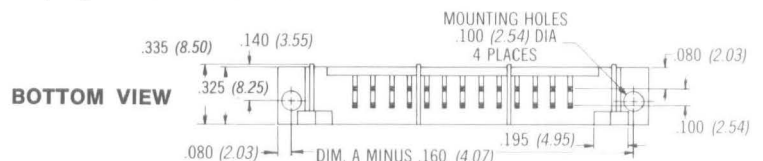
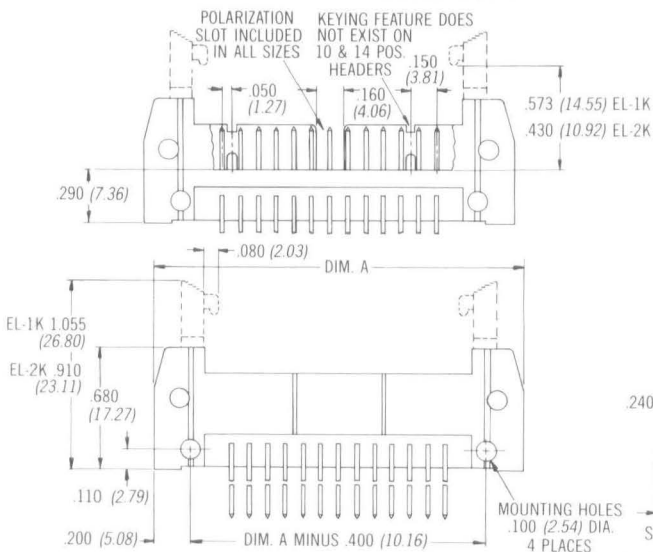
T = 200 μ in. (5.08 μ m) min. Tin over 50 μ in. (1.27 μ m) min. Nickel all over.

Wrap pins

G = 10 μ in. (.254 μ m) min. Gold over 50 μ in. (1.27 μ m) min. Nickel on mating area, Gold Flash on Terminal area.

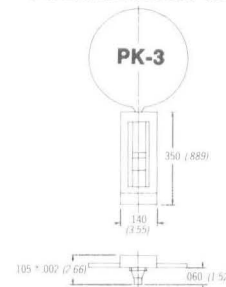
T = 200 μ in. (5.08 μ m) min. Tin over 50 μ in. (1.27 μ m) min. Nickel all over.

VIEW SHOWN WITH SHROUD CUT-AWAY



in. (mm)

POLARIZATION KEY



Optional Ejector Latches	
For	Order
IDS-'K' with Strain Relief	EL-1K
IDS-'K' w/o Strain Relief	EL-2K
Polarization Key	
PK-3	

MATERIALS:

BODY, EJECTOR LATCHES AND POL. KEYS: Glass-Filled Polyester, Black
CONTACTS: Phosphor Bronze

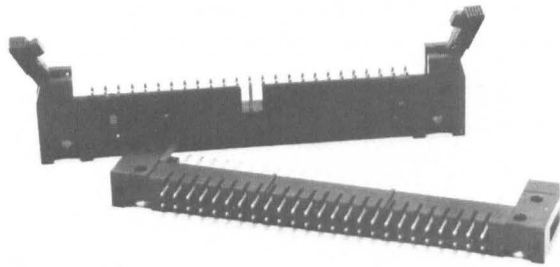
RATINGS:

TEMP. RANGE: -65°C to +125°C
FLAMMABILITY: UL-94V-0

NOTE:

For .062" PCB—L = .102 (2.59)
For .125" PCB—L = .165 (4.19)
For Wire Wrap—L = .610 (15.50)

IDH 'K' SERIES, HEADERS



- Keying Conforms to MIL-C-83503
- Several Plating Options Available
- Optional Ejector Latches
- Stand-Offs For Easier Flux Removal
- Rounded Pins For Easier Insertion to PC Boards
- .025 Square Pins For Mating Area

K-SERIES — HEADERS STRAIGHT AND RIGHT ANGLE PART NUMBERS

For .062" PCB Straight	For .125" PCB Straight	For .062" PCB Right Angle	For .125" PCB Right Angle	Straight Wire-Wrap	Wire-Wrap Right Angle	No. of Contacts	DIM. A Inches (mm)
IDH-10K-S3-X	IDH-10K-S4-X	IDH-10K-SR3-X	IDH-10K-SR4-X	IDH-10K-W-X	IDH-10K-WR-X	10	1.260 (32.00)
IDH-14K-S3-X	IDH-14K-S4-X	IDH-14K-SR3-X	IDH-14K-SR4-X	IDH-14K-W-X	IDH-14K-WR-X	14	1.460 (37.08)
IDH-16K-S3-X	IDH-16K-S4-X	IDH-16K-SR3-X	IDH-16K-SR4-X	IDH-16K-W-X	IDH-16K-WR-X	16	1.560 (39.62)
IDH-20K-S3-X	IDH-20K-S4-X	IDH-20K-SR3-X	IDH-20K-SR4-X	IDH-20K-W-X	IDH-20K-WR-X	20	1.760 (44.70)
IDH-26K-S3-X	IDH-26K-S4-X	IDH-26K-SR3-X	IDH-26K-SR4-X	IDH-26K-W-X	IDH-26K-WR-X	26	2.060 (52.32)
IDH-34K-S3-X	IDH-34K-S4-X	IDH-34K-SR3-X	IDH-34K-SR4-X	IDH-34K-W-X	IDH-34K-WR-X	34	2.460 (62.48)
IDH-40K-S3-X	IDH-40K-S4-X	IDH-40K-SR3-X	IDH-40K-SR4-X	IDH-40K-W-X	IDH-40K-WR-X	40	2.760 (70.10)
IDH-50K-S3-X	IDH-50K-S4-X	IDH-50K-SR3-X	IDH-50K-SR4-X	IDH-50K-W-X	IDH-50K-WR-X	50	3.260 (82.80)
IDH-60K-S3-X	IDH-60K-S4-X	IDH-60K-SR3-X	IDH-60K-SR4-X	IDH-60K-W-X	IDH-60K-WR-X	60	3.760 (95.50)

Suffix X — Denotes plating options

TG = 10 μ in. (.254 μ m) min. Gold over 50 μ in. (1.27 μ m) min. Nickel on mating area, 200 μ in. (5.08 μ m) min. Tin over 50 μ in. (1.27 μ m) min. Nickel on Terminal area.

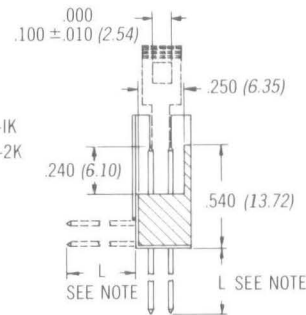
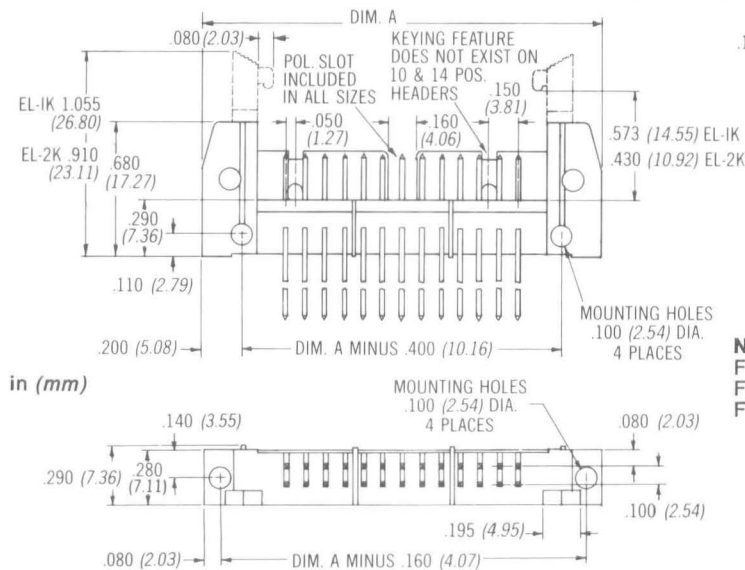
TG30 = 30 μ in. (.254 μ m) min. Gold over 50 μ in. (1.27 μ m) min. Nickel on mating area, 200 μ in. (5.08 μ m) min. Tin over 50 μ in. (1.27 μ m) min. Nickel on Terminal area.

T = 200 μ in. (5.08 μ m) min. Tin over 50 μ in. (1.27 μ m) min. Nickel all over.

Wrap pins

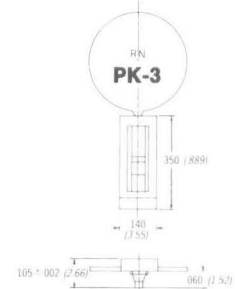
G = 10 μ in. (.254 μ m) min. Gold over 50 μ in. (1.27 μ m) min. Nickel on mating area, Gold Flash on Terminal area.

T = 200 μ in. (5.08 μ m) min. Tin over 50 μ in. (1.27 μ m) min. Nickel all over.



NOTE:
For .062" PCB—L = .102 (2.59)
For .125" PCB—L = .165 (4.19)
For Wire Wrap—L = .610 (15.50)

POLARIZATION KEY



Optional Ejector Latches

For	Order
IDS-K with Strain Relief	EL-1K
IDS-K w/o Strain Relief	EL-2K
Polarization Key	
PK-3	

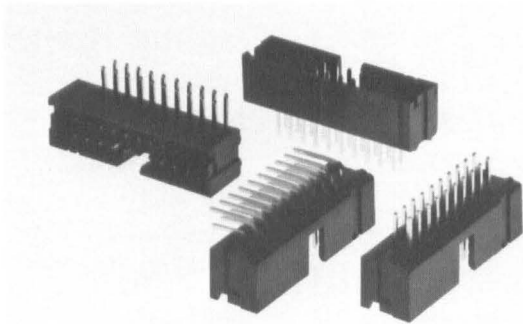
MATERIALS:

BODY, EJECTOR LATCHES AND POL. KEY:
Glass-filled polyester, black
CONTACTS: Phosphor Bronze

RATINGS:

TEMP. RANGE: -65°C to +125°C
FLAMMABILITY: UL-94V-O

IDH-LP SERIES, LOW PROFILE HEADERS



- Header is permanently mounted on PCB and accepts IDS socket connectors
- Straight or right angle mounting options available
- For wrap pin .062" and .125" PCB
- Solder tails are rounded for easy PCB insertion
- .025 square pins for mating area

Low Profile Straight Mount Header Part Numbers

For .062" PCB .028" Rounded Tails	For .125" PCB .028" Rounded Tails	Wrap Pin .025" Sq. Tails	No. of Pins	DIM. A
IDH-10LP-S3-X	IDH-10LP-S4-X	IDH-10LP-W-X	10	.800 (20.32)
IDH-14LP-S3-X	IDH-14LP-S4-X	IDH-14LP-W-X	14	1.000 (25.40)
IDH-16LP-S3-X	IDH-16LP-S4-X	IDH-16LP-W-X	16	1.100 (27.94)
IDH-20LP-S3-X	IDH-20LP-S4-X	IDH-20LP-W-X	20	1.300 (33.02)
IDH-26LP-S3-X	IDH-26LP-S4-X	IDH-26LP-W-X	26	1.600 (40.64)
IDH-34LP-S3-X	IDH-34LP-S4-X	IDH-34LP-W-X	34	2.000 (50.80)
IDH-40LP-S3-X	IDH-40LP-S4-X	IDH-40LP-W-X	40	2.300 (58.42)
IDH-50LP-S3-X	IDH-50LP-S4-X	IDH-50LP-W-X	50	2.800 (70.72)
IDH-60LP-S3-X	IDH-60LP-S4-X	IDH-60LP-W-X	60	3.300 (83.82)

IDH-10LP-SR3-X	IDH-10LP-SR4-X	IDH-10LP-WR-X	10	.800 (20.32)
IDH-14LP-SR3-X	IDH-14LP-SR4-X	IDH-14LP-WR-X	14	1.000 (25.40)
IDH-16LP-SR3-X	IDH-16LP-SR4-X	IDH-16LP-WR-X	16	1.100 (27.94)
IDH-20LP-SR3-X	IDH-20LP-SR4-X	IDH-20LP-WR-X	20	1.300 (33.02)
IDH-26LP-SR3-X	IDH-26LP-SR4-X	IDH-26LP-WR-X	26	1.600 (40.64)
IDH-34LP-SR3-X	IDH-34LP-SR4-X	IDH-34LP-WR-X	34	2.000 (50.80)
IDH-40LP-SR3-X	IDH-40LP-SR4-X	IDH-40LP-WR-X	40	2.300 (58.42)
IDH-50LP-SR3-X	IDH-50LP-SR4-X	IDH-50LP-WX-X	50	2.800 (70.72)
IDH-60LP-SR3-X	IDH-60LP-SR4-X	IDH-60LP-WR-X	60	3.300 (83.82)

Suffix X — Denotes plating options.

- TG = 10 μ in. (.254 μ m) min. Gold over
 50 μ in. (1.27 μ m) min. Nickel on mating area,
 200 μ in. (5.08 μ m) min. Tin over
 50 μ in. (1.27 μ m) min. Nickel on Terminal area.
 TG 30 = 30 μ in. (.254 μ m) min. Gold over
 50 μ in. (1.27 μ m) min. Nickel on mating area,
 200 μ in. (5.08 μ m) min. Tin over
 50 μ in. (1.27 μ m) min. Nickel on Terminal area.
 T = 200 μ in. (5.08 μ m) min. Tin all over.

Wrap pins

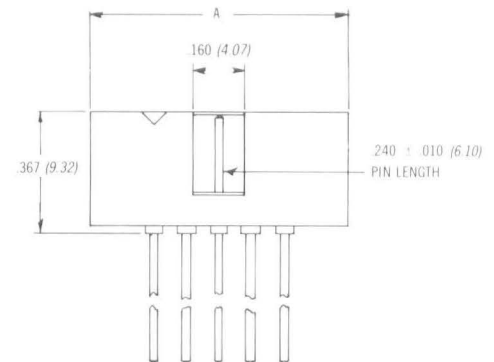
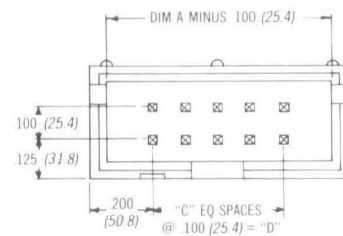
- G = 10 μ in. (.254 μ m) min. Gold over
 50 μ in. (1.27 μ m) min. Nickel on mating area,
 Gold Flash on Terminal area.
 T = 200 μ in. (5.08 μ m) min. Tin over
 50 μ in. (1.27 μ m) min. Nickel all over.

MATERIALS:

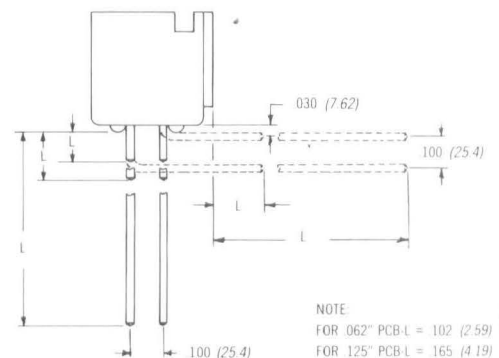
BODY — Glass-filled polyester, black
 CONTACT — Phosphor Bronze

RATINGS:

UL 94V-O
 -65° + 125°C

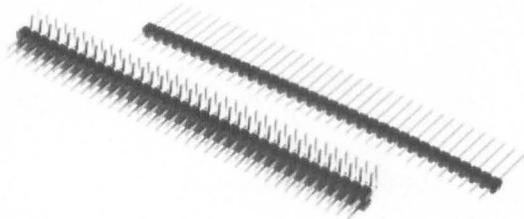


UL Recognized, File Number E-73746



NOTE
 FOR .062" PCB-L = 102 (2.59)
 FOR .125" PCB-L = 165 (4.19)
 FOR WRAP PIN-L = 610 (15.50)

WTS SERIES, ECONOMY HEADERS

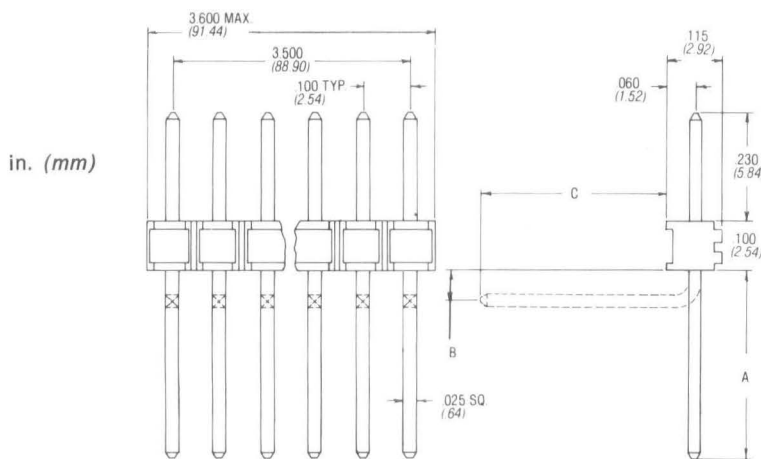


- Low cost header to accept IDS socket connectors
- Straight or right angle versions
- 36 pin is standard size, notched to allow breaking to desired size
- Dual row available straight or right angle

Straight Mount Header Part Numbers		
Straight Pin Gold Plated	Straight Pin Tin Plated	DIM. A
WTS-36S-1-G	WTS-36S-1-T	.100 (2.54)
WTS-36S-2-G	WTS-36S-2-T	.200 (5.08)
WTS-36S-3-G	WTS-36S-3-T	.400 (10.16)
WTS-36S-4-G	WTS-36S-4-T	.500 (12.70)
WTS-36S-5-G	WTS-36S-5-T	.600 (15.24)
WTS-36S-6-G	WTS-36S-6-T	.700 (17.78)
WTS-36S-7-G	WTS-36S-7-T	.900 (22.86)

Right Angle Mount Header Part Numbers			
Right Angle Gold Plated	Right Angle Tin Plated	DIM. B	DIM. C
WTS-36R-1-G	WTS-36R-1-T	.060 (1.52)	.090 (2.29)
WTS-36R-2-G	WTS-36R-2-T	.060 (1.52)	.390 (9.91)
WTS-36R-3-G	WTS-36R-3-T	.060 (1.52)	.590 (14.99)
WTS-36R-4-G	WTS-36R-4-T	.160 (4.06)	.190 (4.83)
WTS-36R-5-G	WTS-36R-5-T	.160 (4.06)	.490 (12.45)
WTS-36R-6-G	WTS-36R-6-T	.160 (4.06)	.690 (17.53)

NOTE: To make dual row headers in the right angle version and maintain proper spacing, it is necessary to combine WTS-36R-1 with -4; or -2 with -5; or -3 with -6.



UL Recognized, File Number E-73746



MATERIALS:

BODY — Glass-filled nylon, black

RATING — UL 94V-O

CONTACTS — Phosphor Bronze

FINISH:

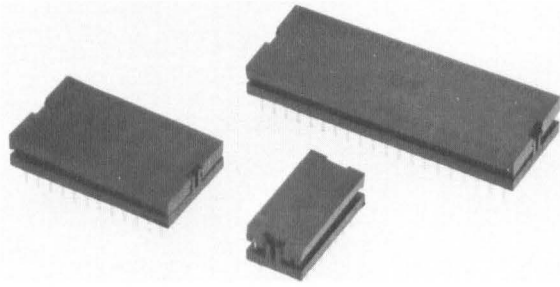
Suffix G:

10 μ inch (.762 μ m) gold, over
50 μ inch (1.27 μ m) nickel in mating
area, gold flash on tails

Suffix T:

200 μ inch (5.08 μ m)
Per MIL-T-10727, type 1

IDP SERIES, CABLE PLUGS



- Provides pluggable termination of cable to PCB thru IDP plugs and standard DIP sockets
- Cover latch allows cover swivel for easy cable insertion
- 14, 16, 24 and 40 contact versions available
- Tapered pin tip, strong leads

Part No.	No. of Contacts	DIM. A	DIM. B	DIM. C
IDP-143-X	14	.760 (19.31)	.300 (7.62)	.420 (10.67)
IDP-163-X	16	.860 (21.84)	.300 (7.62)	.420 (10.67)
IDP-246-X	24	1.280 (32.51)	.600 (15.24)	.720 (18.29)
IDP-406-X	40	2.080 (52.83)	.600 (15.24)	.720 (18.29)

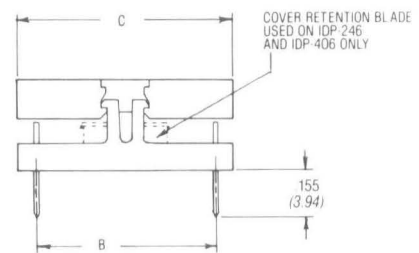
Suffix X — Denotes plating options.

G = 10 μ in. (.254 μ m) min. Gold over
 50 μ in. (1.27 μ m) min. Nickel all over.

G30 = 30 μ in. (.762 μ m) Gold over
 50 μ in. (1.27 μ m) min. Nickel all over.

T = 200 μ in. (5.08 μ m) min. Tin all over.

in. (mm)



MATERIALS:

BODY — Glass-filled polyester, black

CONTACTS — Beryllium Copper

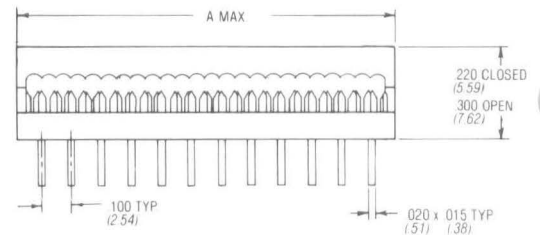
RATINGS:

UL 94V-O
 -65° + 125°C (connector only)

UL Recognized, File Number E-73746

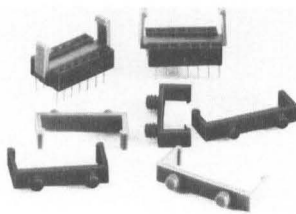


Cable wire No. 2 connects to plug terminal No.1



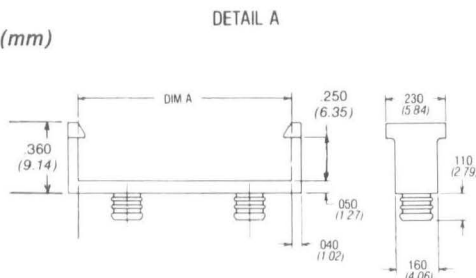
RC SERIES, RETAINING CLIPS

- Holds IDP assembly firmly in ICN series socket

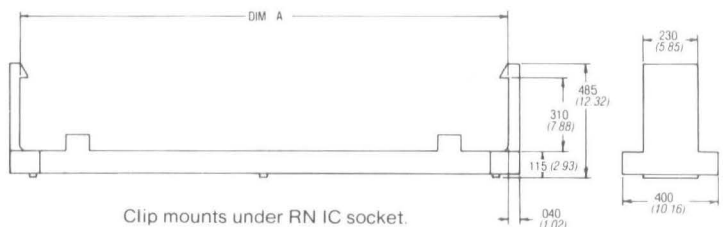


Clip Part No.	No. of Contacts	Detail	TO BE USED WITH		DIM. A
			IDP Plug	IC Socket	
RC-75	14	A	IDP-143	ICN-143-S3-X	.765 (19.44)
RC-76	16	A	IDP-163	ICN-163-S3-X	.865 (21.98)
RC-81	24	B	IDP-246	ICN-246-S5-X	1.295 (32.90)
RC-82	40	B	IDP-406	ICN-406-S5-X	2.095 (53.22)

in. (mm)

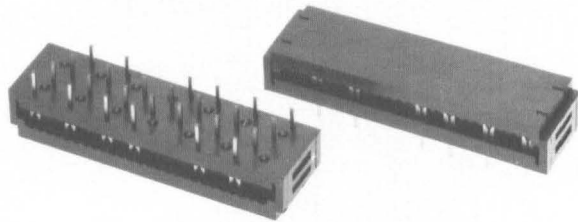


DETAIL B



Clip mounts under RN IC socket.

IDT SERIES, TRANSITION CONNECTORS



- Connector used to permanently attach cable to PCB
- Gold or tin plated options available
- Lead length options for .062" and .125" thick PCB
- Cable can be attached before or after soldering connector to PCB

Transition Connector Part Numbers for .062" PCB

Tin Contacts	No. of Contacts	DIM. A	DIM. B
IDT-10-1-T	10	.700 (17.78)	.100 (2.54)
IDT-20-1-T	20	1.200 (30.48)	.100 (2.54)
IDT-26-1-T	26	1.500 (38.10)	.100 (2.54)
IDT-34-1-T	34	1.900 (48.26)	.100 (2.54)
IDT-40-1-T	40	2.200 (55.88)	.100 (2.54)
IDT-50-1-T	50	2.700 (68.58)	.100 (2.54)

Transition Connector Part Numbers for .125" PCB

IDT-10-2-T	10	.700 (17.78)	.156 (3.97)
IDT-20-2-T	20	1.200 (30.48)	.156 (3.97)
IDT-26-2-T	26	1.500 (38.10)	.156 (3.97)
IDT-34-2-T	34	1.900 (48.26)	.156 (3.97)
IDT-40-2-T	40	2.200 (55.88)	.156 (3.97)
IDT-50-2-T	50	2.700 (68.58)	.156 (3.97)

MATERIALS:

BODY — Glass-filled polyester, black
CONTACTS — Beryllium Copper

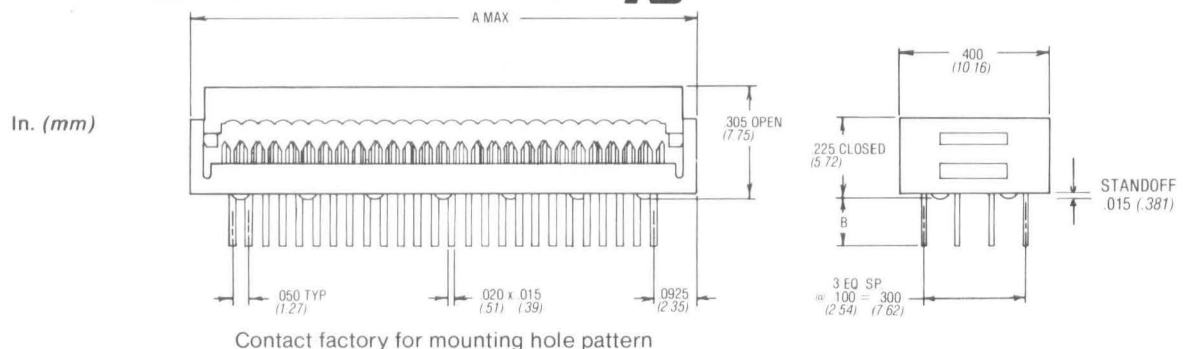
FINISH:

Suffix T:
200 μ inch (5.08) per
MIL-T-10727 type 1
For gold contact factory

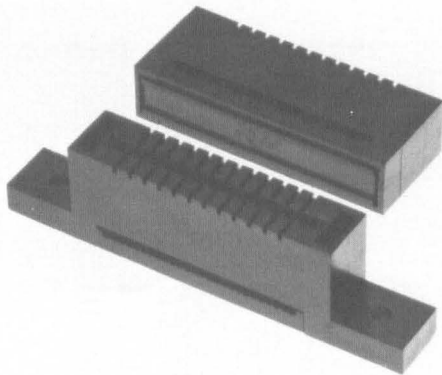
RATINGS:

UL 94V-O
-65° + 125°C (connector only)

UL Recognized, File Number E-73746



IDE SERIES, CARD EDGE CONNECTORS



- Three mounting styles
- 10 through 60 position
- Accepts .062" PCB's

Part No.	Detail	No. of Contacts	DIM. A
IDE-10-X	A	10	.960 (24.38)
IDE-10-H-X	B	10	.960 (24.38)
IDE-10-E-X	C	10	.960 (24.38)
IDE-14-X	A	14	1.160 (29.46)
IDE-14-H-X	B	14	1.160 (29.46)
IDE-14-E-X	C	14	1.160 (29.46)
IDE-16-X	A	16	1.260 (32.00)
IDE-16-H-X	B	16	1.260 (32.00)
IDE-16-E-X	C	16	1.260 (32.00)
IDE-20-X	A	20	1.460 (37.08)
IDE-20-H-X	B	20	1.460 (37.08)
IDE-20-E-X	C	20	1.460 (37.08)
IDE-26-X	A	26	1.760 (44.70)
IDE-26-H-X	B	26	1.760 (44.70)
IDE-26-E-X	C	26	1.760 (44.70)
IDE-34-X	A	34	2.160 (54.86)
IDE-34-H-X	B	34	2.160 (54.86)
IDE-34-E-X	C	34	2.160 (54.86)
IDE-40-X	A	40	2.460 (62.48)
IDE-40-H-X	B	40	2.460 (62.48)
IDE-40-E-X	C	40	2.460 (62.48)
IDE-50-X	A	50	2.960 (75.18)
IDE-50-H-X	B	50	2.960 (75.18)
IDE-50-E-X	C	50	2.960 (75.18)
IDE-60-X	A	60	3.460 (87.88)
IDE-60-H-X	B	60	3.460 (87.88)
IDE-60-E-X	C	60	3.460 (87.88)

Suffix X — Denotes plating options.

- TG = 10 μ in. (.254 μ m) min. Gold over
50 μ in. (1.27 μ m) min. Nickel on mating area,
200 μ in. (5.08 μ m) min. Tin over
50 μ in. (1.27 μ m) min. Nickel on Terminal area.
- TG30 = 30 μ in. (.762 μ m) min. Gold over
50 μ in. (1.27 μ m) min. Nickel on mating area,
200 μ in. (5.08 μ m) min. Tin over
50 μ in. (1.27 μ m) min. Nickel on Terminal area.
- T = 200 μ in. (5.08 μ m) min. Tin all over.

MATERIALS:

LID & BODY — Glass-filled polyester, black
CONTACT — Beryllium Copper

RATINGS:

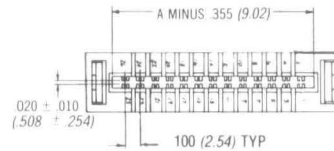
UL 94V-0
-65° + 125°C (connector only)

Polarization Key - Order Part No. PK-2

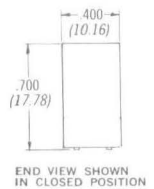
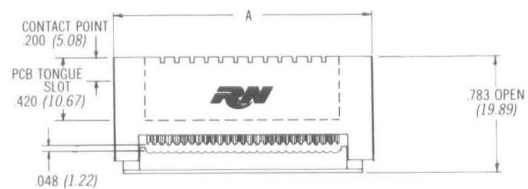
UL Recognized, File Number E-73746



DETAIL A

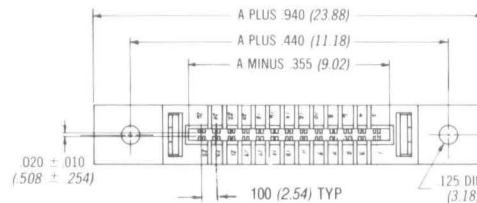


in. (mm)

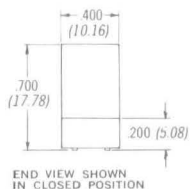
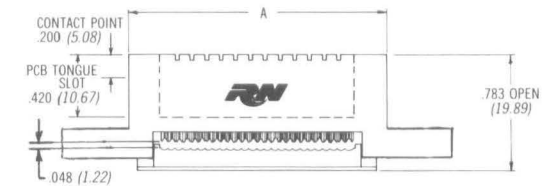


END VIEW SHOWN IN CLOSED POSITION

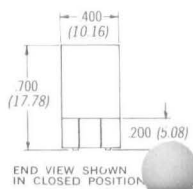
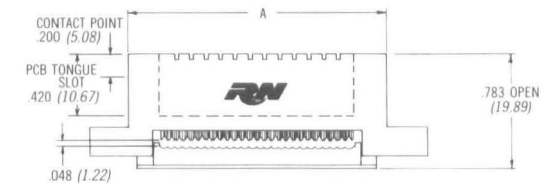
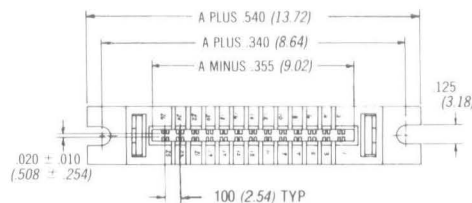
DETAIL B



DETAIL C

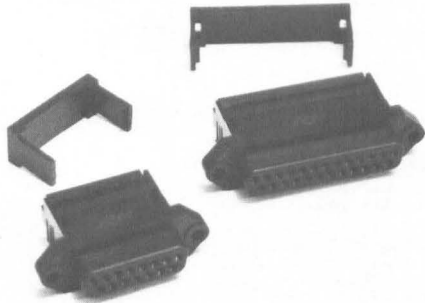


END VIEW SHOWN IN CLOSED POSITION



END VIEW SHOWN IN CLOSED POSITION

IDD SERIES, SOCKET CONNECTOR



- Single Piece All Plastic Construction
- Utilizes Std. 28 ga. IDC cable
- Selective Plate
- 9, 15, 25, 37 Contact Versions Available
- Strain Relief Included
- Compatible With Industry Standards

DELTA CONNECTOR PART NUMBERS — SOCKET

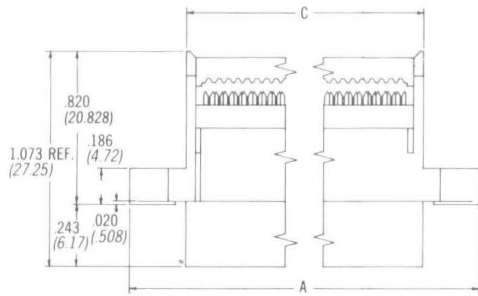
Standard with Strain Relief	No. of Contacts	DIM. A	DIM. B	DIM. C	DIM. D	DIM. E	DIM. F
IDD- 9 S-X	9	1.213 (30.81)	.984 (24.99)	.630 (16.00)	.643 (16.33)	.744 (18.897)	.753 (19.13)
IDD-15 S-X	15	1.541 (39.14)	1.312 (33.32)	.957 (24.31)	.971 (24.66)	1.071 (27.203)	1.081 (27.40)
IDD-25 S-X	25	2.088 (53.03)	1.852 (47.04)	1.502 (38.15)	1.511 (38.38)	1.616 (41.046)	1.621 (41.173)
IDD-37 S-X	37	2.729 (69.32)	2.500 (63.50)	2.156 (54.76)	2.159 (54.84)	2.271 (57.683)	2.269 (57.632)

Suffix X — Denotes plating options.

TG = 10 μ in. (.254 μ m) min. Gold over 50 μ in. (1.27 μ m) min. Nickel on mating area, 200 μ in. (5.08 μ m) min. Tin over 50 μ in. (1.27 μ m) min. Nickel on Terminal area.

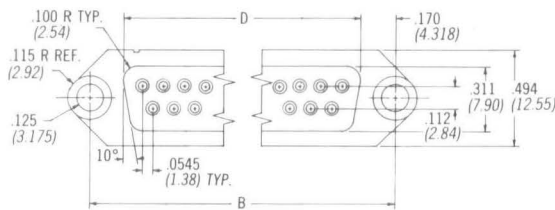
TG30 = 30 μ in. (.762 μ m) min. Gold over 50 μ in. (1.27 μ m) min. Nickel on mating area, 200 μ in. (5.08 μ m) min. Tin over 50 μ in. (1.27 μ m) min. Nickel on Terminal area.

T = 200 μ in. (5.08 μ m) min. Tin all over.



in (mm)

DETAIL A



DETAIL B

MATERIALS:

LID & BODY — Glass Filled Polyester

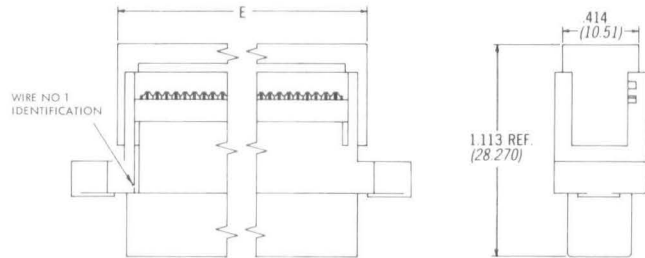
CONTACT — Beryllium Copper

RATINGS:

UL 94V-O

-65° +125°C

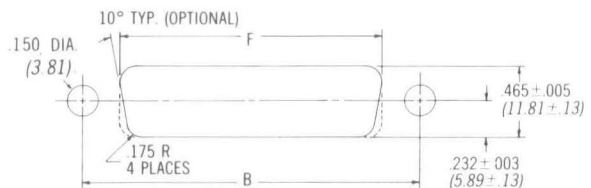
Connector with Strain Relief



DETAIL C

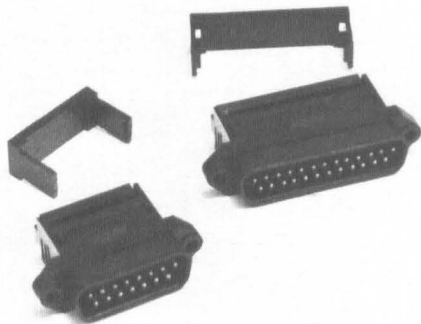
DETAIL D

Mounting Cut-out Detail



DETAIL E

IDD SERIES, PIN CONNECTOR



- Single Piece All Plastic Construction
- Utilizes Std. 28 ga. IDC cable
- Selective Plate
- 9, 15, 25, 37 Contact Versions Available
- Strain Relief Included
- Compatible With Industry Standards

DELTA CONNECTOR PART NUMBERS — SOCKET

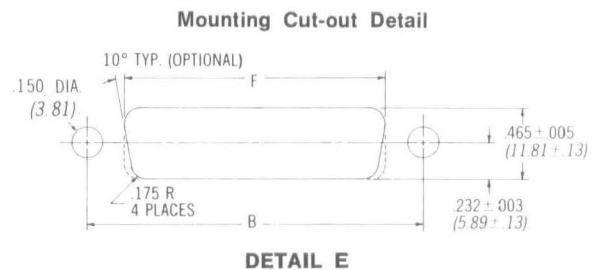
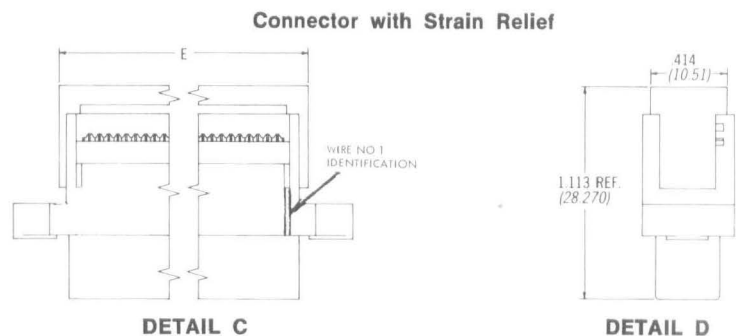
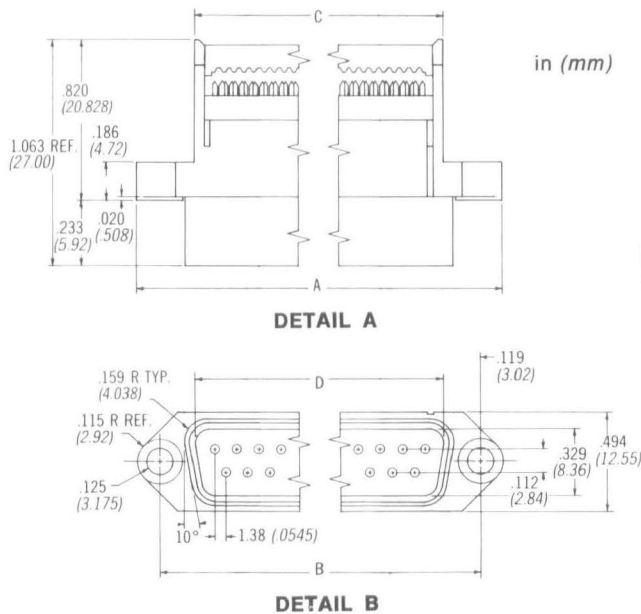
Standard with Strain Relief	No. of Contacts	DIM. A	DIM. B	DIM. C	DIM. D	DIM. E	DIM. F
IDD- 9 S-X	9	1.213 (30.81)	.984 (24.99)	.630 (16.00)	.643 (16.33)	.744 (18.897)	.753 (19.13)
IDD-15 S-X	15	1.541 (39.14)	1.312 (33.32)	.957 (24.31)	.971 (24.66)	1.071 (27.203)	1.081 (27.40)
IDD-25 S-X	25	2.088 (53.03)	1.852 (47.04)	1.502 (38.15)	1.511 (38.38)	1.616 (41.046)	1.621 (41.173)
IDD-37 S-X	37	2.729 (69.32)	2.500 (63.50)	2.156 (54.76)	2.159 (54.84)	2.271 (57.683)	2.269 (57.632)

Suffix X — Denotes plating options.

TG = 10 μ in. (.254 μ m) min. Gold over 50 μ in. (1.27 μ m) min. Nickel on mating area, 200 μ in. (5.08 μ m) min. Tin over 50 μ in. (1.27 μ m) min. Nickel on Terminal area.

TG30 = 30 μ in. (.254 μ m) min. Gold over 50 μ in. (1.27 μ m) min. Nickel on mating area, 200 μ in. (5.08 μ m) min. Tin over 50 μ in. (1.27 μ m) min. Nickel on Terminal area.

T = 200 μ in. (5.08 μ m) min. Tin all over.



MATERIALS:

LID & BODY — Glass Filled Polyester

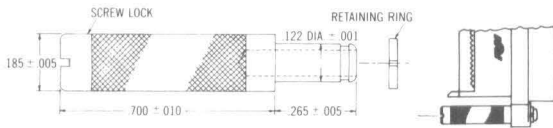
CONTACT — Beryllium Copper

RATINGS:

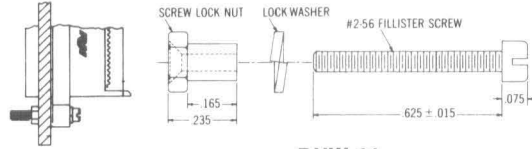
UL 94V-O

-65° +125°C

IDD CONNECTOR HARDWARE

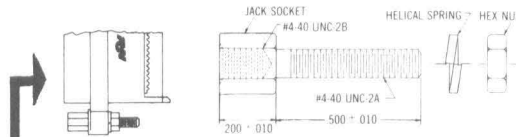


DHW-1
Kit contains two
of above assembly



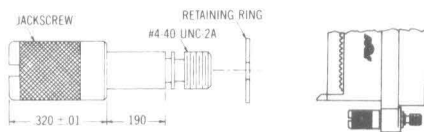
DHW-11
Kit contains two
of above assembly

RN Kits DHW-1 and DHW-11 are used to retain 2 "D" connectors to each other through a panel or PC Board.

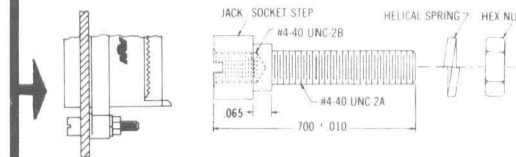


DHW-21
Kit contains two
of above assembly

RN Kits DHW-2 and DHW-21 are used to retain 2 "D" connectors as mated pair cable splice.

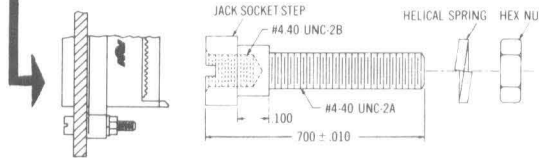


DHW-2
Kit contains two
of above assembly



DHW-22
Kit contains two
of above assembly

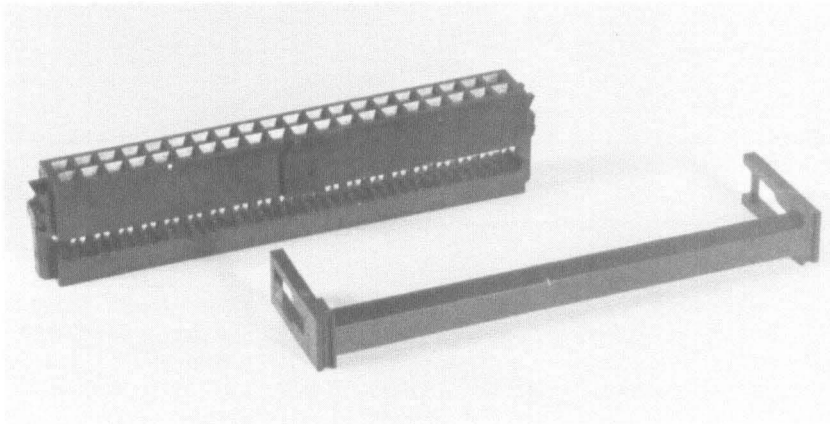
RN Kits DHW-2 and DHW-22 are used to retain 2 "D" connectors through a .090" panel or PC Board.



DHW-23
Kit contains two
of above assembly

RN Kits DHW-2 and DHW-23 are used to retain 2 "D" connectors through a .125" panel or PC Board.

IDS SERIES, See Page 27 for Recommended Design



- Provides pluggable termination of cable to PCB thru IDS sockets and IDH headers
- Single piece body construction for easy assembly, strain relief attached after assembly
- Rugged cover latch and optional strain relief for dependability
- Strain relief can be purchased separately
- Polarization tab option

Part Numbers					
Standard	With Strain Relief	DETAIL	Strain Relief Only	No. of Contacts	DIM. A
IDS-10-G	IDS-10-SR-G	A	SR-10	10	.680 (17.27)
IDS-10NP-G	IDS-10NP-SR-G	B			
IDS-20-G	IDS-20-SR-G	A	SR-20	20	1.180 (29.97)
IDS-20NP-G	IDS-20NP-SR-G	B			
IDS-26-G	IDS-26-SR-G	A	SR-26	26	1.480 (37.59)
IDS-26NP-G	IDS-26NP-SR-G	B			
IDS-34-G	IDS-34-SR-G	A	SR-34	34	1.880 (47.75)
IDS-34NP-G	IDS-34NP-SR-G	B			
IDS-40-G	IDS-40-SR-G	A	SR-40	40	2.180 (55.37)
IDS-40NP-G	IDS-40NP-SR-G	B			
IDS-50-G	IDS-50-SR-G	A	SR-50	50	2.680 (68.07)
IDS-50NP-G	IDS-50NP-SR-G	B			

Suffix —, Denotes plating

— G = 10 μ in. (.254 μ m) min. Gold over
50 μ in. (1.27 μ m) min. Nickel all over.

Polarization Key — Order Part No. PK-1

UL Recognized, File Number E-73746

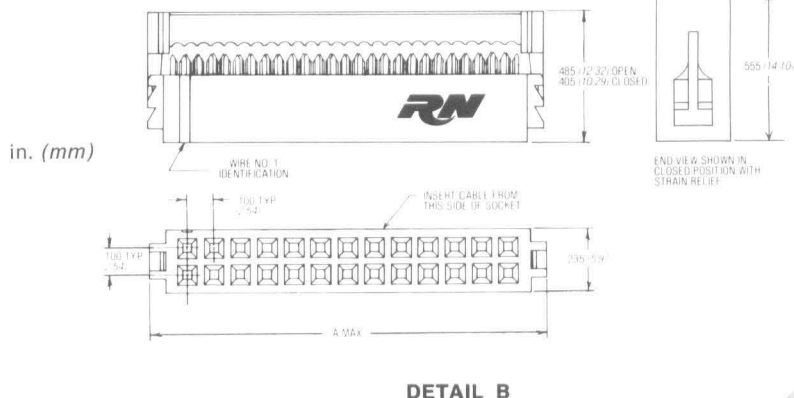
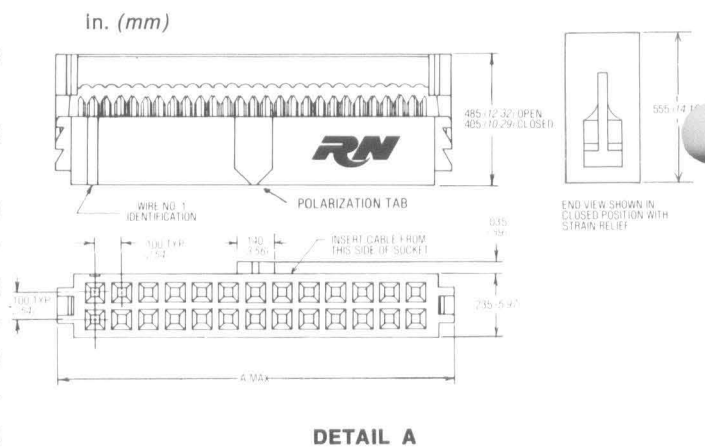


MATERIALS:

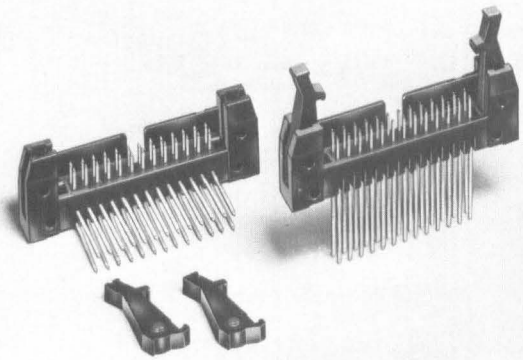
BODY — Glass-filled polyester, black
CONTACTS — Beryllium copper

RATINGS:

UL 94V-O
-65°C to +125°C (Connector only)



IDH SERIES, See Page 28, 29 for Recommended Design



- Header is permanently mounted on PCB and accepts IDS socket connectors
- Straight or right angle mounting options available
- For wrap pin, .062", and .125" PCB
- Ejector/latch option available, latches IDS socket in place when closed, serves as ejector when open
- Solder tails are rounded for easy PCB insertion
- .025 square pins for mating area

Straight Mount Header Part Numbers

For .062" PCB .028" Rd. Tail	For .125" PCB .028" Rd. Tail	Wrap Pin .025" Sq. Tail	No. of Pins	DIM. A
IDH-10-S3-TG	IDH-10-S4-TG	IDH-10-W-G	10	1.260 (32.00)
IDH-20-S3-TG	IDH-20-S4-TG	IDH-20-W-G	20	1.760 (44.70)
IDH-26-S3-TG	IDH-26-S4-TG	IDH-26-W-G	26	2.060 (52.32)
IDH-34-S3-TG	IDH-34-S4-TG	IDH-34-W-G	34	2.460 (62.48)
IDH-40-S3-TG	IDH-40-S4-TG	IDH-40-W-G	40	2.760 (70.10)
IDH-50-S3-TG	IDH-50-S4-TG	IDH-50-W-G	50	3.260 (82.80)

Right Angle Mount Header

IDH-10-SR3-TG	IDH-10-SR4-TG	IDH-10-WR-G	10	1.260 (32.00)
IDH-20-SR3-TG	IDH-20-SR4-TG	IDH-20-WR-G	20	1.760 (44.70)
IDH-26-SR3-TG	IDH-26-SR4-TG	IDH-26-WR-G	26	2.060 (52.32)
IDH-34-SR3-TG	IDH-34-SR4-TG	IDH-34-WR-G	34	2.460 (62.48)
IDH-40-SR3-TG	IDH-40-SR4-TG	IDH-40-WR-G	40	2.760 (70.10)
IDH-50-SR3-TG	IDH-50-SR4-TG	IDH-50-WR-G	50	3.260 (82.80)

Ejector Latches

IDS with Strain Relief	EL-1
IDS w/o Strain Relief	EL-2

Suffix — Denotes plating

TG = 10 μ in. (.254 μ m) min. Gold over
 50 μ in. (1.27 μ m) min. Nickel on mating area,
 200 μ in. (5.08 μ m) min. Tin over
 50 μ in. (1.27 μ m) min. Nickel in Terminal area.

Wrap pins

G = 10 μ in. (.254 μ m) min. Gold over
 50 μ in. (1.27 μ m) min. Nickel on mating area.
 Gold finish on Terminal area.

UL Recognized, File Number E-73746

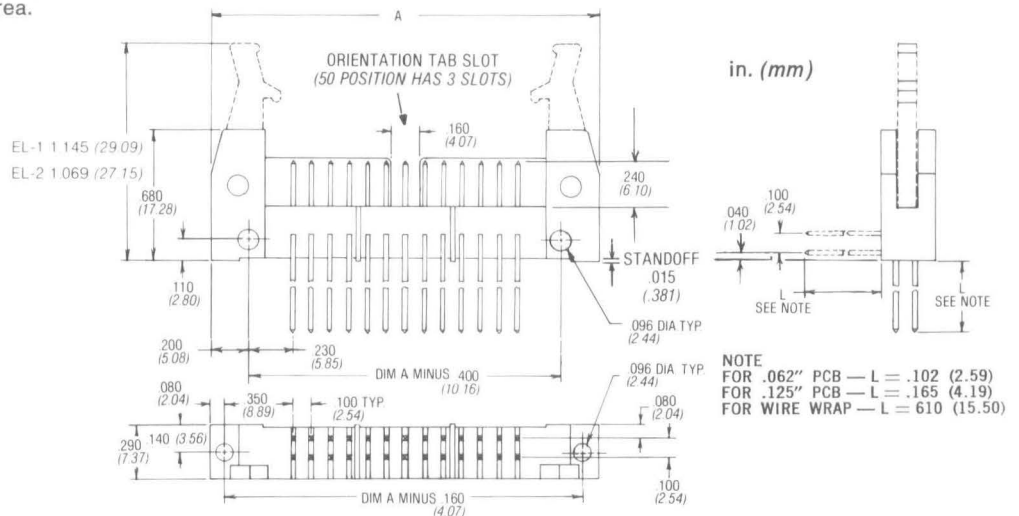


MATERIALS:

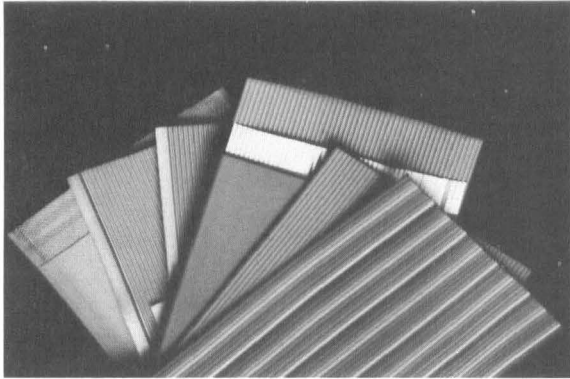
BODY — Glass-filled polyester, black
 CONTACT — Phosphor Bronze

RATINGS:

UL 94V-O
 -65° + 125°C

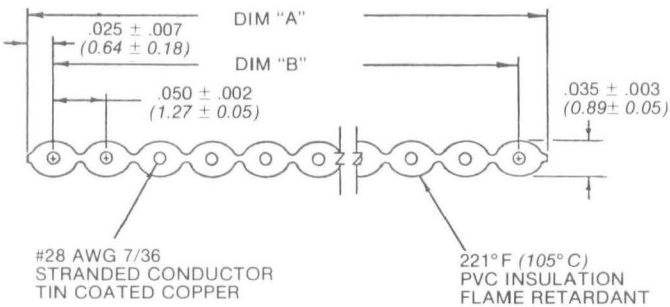


CAB SERIES, FLAT CABLE



- Compatible with all **RN** IDC products
- .050" pitch, 28 ga stranded conductors
- 9 thru 60 conductors, 100 foot rolls
- Ground Plane with and without Drain, Shielded and Jacketed available

SOLID COLOR CABLE UL STYLE 2651

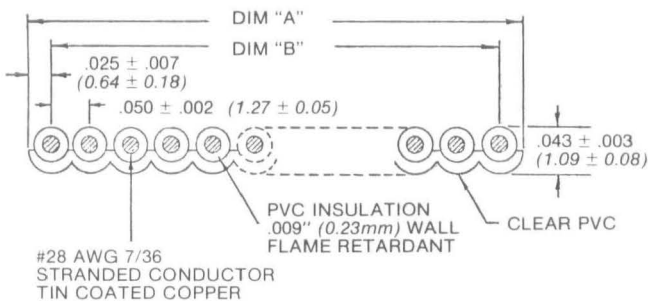


NOTE: MARKING ON ONE EDGE OF CABLE.

In. (mm)

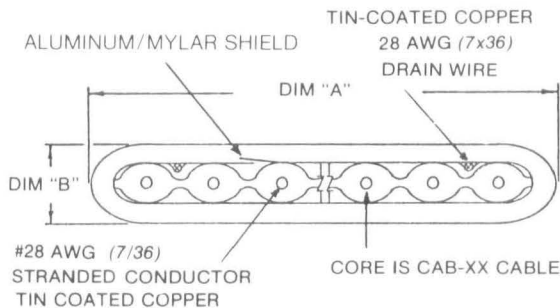
Part No.	DIM "A"		DIM "B"	
CAB-9	0.450 ± .010	(11.43 ± 0.25)	0.400 ± .007	(10.16 ± 0.18)
CAB-10	0.500 ± .010	(12.70 ± 0.25)	0.450 ± .007	(11.43 ± 0.18)
CAB-14	0.700 ± .010	(17.80 ± 0.25)	0.650 ± .007	(16.51 ± 0.18)
CAB-15	0.750 ± .010	(19.05 ± 0.25)	0.700 ± .007	(17.78 ± 0.18)
CAB-16	0.800 ± .010	(20.32 ± 0.25)	0.750 ± .009	(19.05 ± 0.23)
CAB-20	1.000 ± .015	(25.4 ± 0.38)	0.950 ± .009	(24.13 ± 0.23)
CAB-24	1.200 ± .015	(30.48 ± 0.38)	1.150 ± .009	(29.21 ± 0.23)
CAB-25	1.250 ± .015	(31.75 ± 0.38)	1.200 ± .009	(30.48 ± 0.23)
CAB-26	1.300 ± .015	(33.02 ± 0.38)	1.250 ± .009	(31.75 ± 0.23)
CAB-34	1.700 ± .015	(43.18 ± 0.38)	1.650 ± .009	(41.91 ± 0.23)
CAB-37	1.850 ± .015	(46.99 ± 0.38)	1.800 ± .011	(45.72 ± 0.28)
CAB-40	2.000 ± .015	(50.8 ± 0.38)	1.950 ± .011	(49.53 ± 0.28)
CAB-50	2.500 ± .015	(63.5 ± 0.38)	2.450 ± .011	(62.23 ± 0.28)
CAB-60	3.000 ± .015	(76.20 ± 0.38)	2.950 ± .011	(74.93 ± 0.28)

COLOR-CODED CABLE UL STYLE 2884



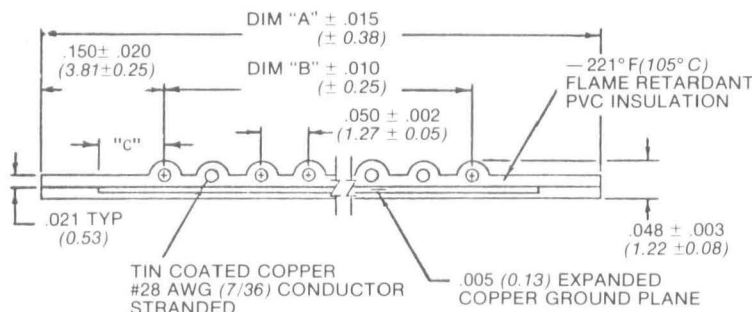
Part No.	DIM "A"		DIM "B"	
CAB-9-CC	0.450 ± .010	(11.43 ± .025)	0.400 ± .007	(10.16 ± 0.18)
CAB-10-CC	0.500 ± .010	(12.70 ± 0.25)	.450 ± .010	(11.43 ± 0.18)
CAB-14-CC	0.700 ± .010	(17.78 ± 0.25)	0.650 ± .007	(16.51 ± 0.18)
CAB-15-CC	0.750 ± .010	(19.05 ± 0.25)	0.700 ± .007	(17.78 ± 0.18)
CAB-16-CC	0.800 ± .015	(20.32 ± 0.38)	0.750 ± .011	(19.05 ± 0.28)
CAB-20-CC	1.000 ± .015	(25.40 ± 0.38)	0.950 ± .011	(24.13 ± 0.28)
CAB-24-CC	1.200 ± .015	(30.48 ± 0.38)	1.150 ± .011	(29.21 ± 0.28)
CAB-25-CC	1.250 ± .015	(31.75 ± 0.38)	1.200 ± .011	(30.48 ± 0.28)
CAB-26-CC	1.300 ± .015	(33.02 ± 0.38)	1.250 ± .011	(31.75 ± 0.28)
CAB-34-CC	1.700 ± .020	(43.18 ± 0.51)	1.650 ± .015	(41.91 ± 0.38)
CAB-37-CC	1.850 ± .020	(46.99 ± 0.51)	1.800 ± .015	(45.72 ± 0.38)
CAB-40-CC	2.000 ± .020	(50.80 ± 0.51)	1.950 ± .015	(49.53 ± 0.38)
CAB-50-CC	2.500 ± .020	(63.50 ± 0.51)	2.450 ± .015	(62.23 ± 0.38)
CAB-60-CC	3.000 ± .020	(76.20 ± 0.51)	2.950 ± .015	(75.93 ± 0.38)

SHIELDED, JACKETED CABLE UL STYLE 2912



Part No.	DIM "A"	DIM "B"	Jacket Wall Thickness (Nom)
CAB-9-SJ	0.520 ± .020 (13.20 ± 0.51)	.115 ± .015 (2.92 ± 0.38)	.035 (0.89)
CAB-10-SJ	0.570 ± .020 (14.48 ± 0.51)	.115 ± .015 (2.92 ± 0.38)	.035 (0.89)
CAB-14-SJ	0.770 ± .030 (19.56 ± 0.76)	.115 ± .015 (2.92 ± 0.38)	.035 (0.89)
CAB-15-SJ	0.820 ± .030 (20.82 ± 0.76)	.115 ± .015 (2.92 ± 0.38)	.035 (0.89)
CAB-16-SJ	0.870 ± .035 (22.10 ± 0.89)	.115 ± .015 (2.92 ± 0.38)	.035 (0.89)
CAB-20-SJ	1.070 ± .040 (27.18 ± 1.02)	.115 ± .015 (2.92 ± 0.38)	.035 (0.89)
CAB-24-SJ	1.270 ± .040 (32.26 ± 1.02)	.115 ± .015 (2.92 ± 0.38)	.035 (0.89)
CAB-25-SJ	1.320 ± .050 (33.52 ± 1.27)	.115 ± .015 (2.92 ± 0.38)	.035 (0.89)
CAB-26-SJ	1.370 ± .050 (34.80 ± 1.27)	.115 ± .015 (2.92 ± 0.38)	.035 (0.89)
CAB-34-SJ	1.800 ± .060 (45.72 ± 1.53)	.145 ± .015 (3.68 ± 0.38)	.050 (1.27)
CAB-37-SJ	1.950 ± .060 (65.12 ± 1.53)	.145 ± .015 (3.68 ± 0.38)	.050 (1.27)
CAB-40-SJ	2.100 ± .060 (53.34 ± 1.53)	.145 ± .015 (3.68 ± 0.38)	.050 (1.27)
CAB-50-SJ	2.600 ± .060 (66.04 ± 1.53)	.145 ± .015 (3.68 ± 0.38)	.050 (1.27)
CAB-60-SJ	3.100 ± .060 (78.74 ± 1.53)	.145 ± .015 (3.68 ± 0.38)	.050 (1.27)

GROUND PLANE CABLE UL STYLE 2682 (Consult Factory for stripping instructions)

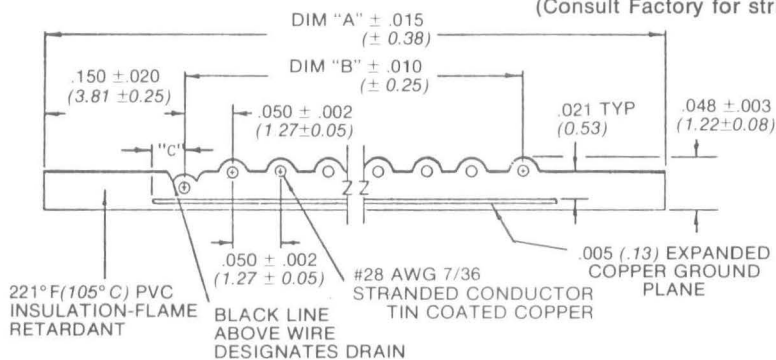


Part No.	DIM "A"	DIM "B"
CAB-9-GP	0.700 (17.78)	0.400 (10.16)
CAB-10-GP	0.750 (19.05)	0.450 (11.43)
CAB-14-GP	0.950 (24.13)	0.650 (16.51)
CAB-15-GP	1.000 (25.40)	0.700 (17.78)
CAB-16-GP	1.050 (26.67)	0.750 (19.05)
CAB-20-GP	1.250 (31.75)	0.950 (24.13)
CAB-24-GP	1.450 (36.83)	1.150 (29.21)
CAB-25-GP	1.500 (38.10)	1.200 (30.48)
CAB-26-GP	1.550 (39.37)	1.250 (31.75)
CAB-34-GP	1.950 (49.53)	1.650 (41.91)
CAB-37-GP	2.100 (53.34)	1.800 (45.72)
CAB-40-GP	2.250 (57.15)	1.950 (49.53)
CAB-50-GP	2.750 (69.85)	2.450 (62.23)
CAB-60-GP	3.250 (82.55)	2.950 (74.93)

DIM "C" .025" (.64) Min. Both Sides
Depth of flats .010 (.25) Ref.

NOTE: MARKING ON ONE EDGE OF CABLE

GROUND PLANE CABLE WITH DRAIN UL STYLE 2682 (Consult Factory for stripping instructions)



Part No.	DIM "A"	DIM "B"
CAB-9-GPD	0.700 (17.78)	0.400 (10.16)
CAB-10-GPD	0.750 (19.05)	0.450 (11.43)
CAB-14-GPD	0.950 (24.13)	0.650 (16.51)
CAB-15-GPD	1.000 (25.40)	0.700 (17.78)
CAB-16-GPD	1.050 (26.67)	0.750 (19.05)
CAB-20-GPD	1.250 (31.75)	0.950 (24.13)
CAB-25-GPD	1.500 (38.10)	1.200 (30.48)
CAB-26-GPD	1.550 (39.37)	1.250 (31.75)
CAB-34-GPD	1.950 (49.53)	1.650 (41.91)
CAB-37-GPD	2.100 (53.34)	1.800 (45.72)
CAB-40-GPD	2.250 (57.15)	1.950 (49.53)
CAB-50-GPD	2.750 (69.85)	2.450 (62.23)
CAB-60-GPD	3.250 (82.55)	2.950 (74.93)

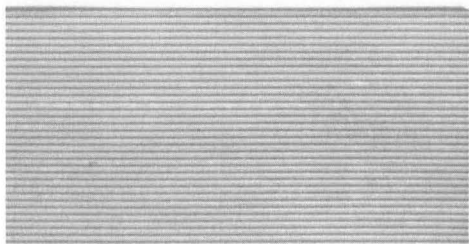
DIM "C" .025" (.64) Min. Both Sides
Depth of flats .010 (.25) Ref.

Shielded and Jacketed Flat Cable	
Connector Style	Recommended Strip Length ± .015 (.38)
IDS-XXNP	.235 (5.97)
IDS-XXNP-SR	.500 (12.70)
IDS-XX	.270 (6.86)
IDS-XX-SR	.500 (12.70)
IDP-143, 163	.420 (10.67)
IDP-246, 406	.720 (18.29)
IDT	.400 (10.16)
IDE	.400 (10.16)
IDD	.425 (10.75)
IDD-XX-SR	.800 (20.32)



FLAT CABLE CUTTER
Part No. CT-3

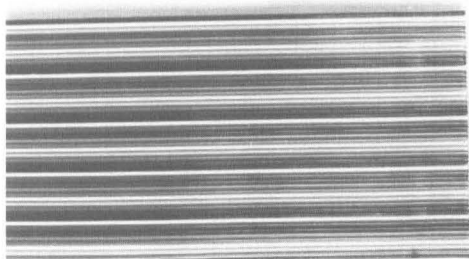
• Hand-cuts all **RN** Flat Cable with square, clean edges



SOLID COLOR CABLE

UL STYLE 2651

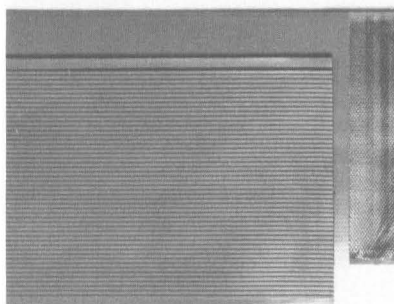
PAGE 34



COLOR-CODED CABLE

UL STYLE 2884

PAGE 34

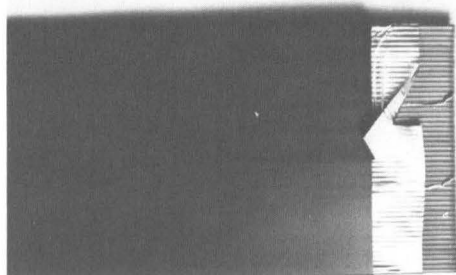


GROUND PLANE CABLE

(with and w/o drain)

UL STYLE 2682

PAGE 35



SHIELDED AND JACKETED CABLE

UL STYLE 2912

PAGE 35

FLAT CABLE SPECIFICATIONS

CABLE STYLE	SOLID COLOR CAB-XX	COLOR-CODED CAB-XX-CC	GROUND PLANE CAB-XX-GP(D)	SHIELDED AND JACKETED CAB-XX-SJ
Insulation Material	PVC, UL VW-1	PVC, UL VW-1	PVC, UL VW-1	PVC, UL VW-1
Color	Gray	See note 1 10 Color Repeat	Gray	Gray
Edge Marking	One Edge	None	One Edge (Black Line over Drain Wire)	One Edge (Core)
Center Spacing in (mm)	.050 (1.27)	.050 (1.27)	.050 (1.27)	.050 (1.27)
Conductor	Stranded copper, tinned	Stranded copper, tinned	Stranded copper, tinned	Stranded copper, tinned
Conductor Size	#28 AWG $\frac{7 \times 36}{(7 \times 127)}$	#28 AWG $\frac{7 \times 36}{(7 \times 127)}$	#28 AWG $\frac{7 \times 36}{(7 \times 127)}$	#28 AWG $\frac{7 \times 36}{(7 \times 127)}$
Conductor Quantity	9, 10, 14, 15, 16 20, 24, 25, 26, 34 37, 40, 50, 60	9, 10, 14, 15, 16 20, 24, 25, 26, 34 37, 40, 50, 60	9, 10, 14, 15, 16 20, 24, 25, 26, 34 37, 40, 50, 60	9, 10, 14, 15, 16 20, 24, 25, 26, 34 37, 40, 50, 60
Impedance <small>See note 2 ohms</small>	105	105	55	75
Capacitance $\frac{\text{pf/ft}}{(\text{pf/m})}$	15 (49.2)	15 (49.2)	33.6 (110.2)	25 (82.0)
Inductance $\frac{\mu\text{H/ft}}{\mu\text{H/m}}$.20 (.66)	.20 (.66)	.10 (.33)	.14 (.46)
Propagation Delay $\frac{\text{ns/ft}}{(\text{ns/m})}$	1.4 (4.59)	1.4 (4.59)	1.65 (5.41)	1.5 (4.92)
Insulation Resistance <small>See note 3</small>	>10 ⁴ M	>10 ³ M	>10 ³ M	>10 ⁴ M
Rise Time ns	3	3	1.8	1.8
Voltage Rating	300 V RMS	300 V RMS	300 V RMS	150 V RMS
Temperature Rating <small>See note 4</small>	-4° + 221°F (-20° + 105°C)	-4° + 221°F (-20° + 105°C)	-4° + 221°F (-20° + 105°C)	-4° + 176°F (-20° + 80°C)
UL Style Number	2651	2884	2682	2912

Note 1 — Brown, Red, Orange, Yellow, Green, Blue, Purple, Gray, White, Black.

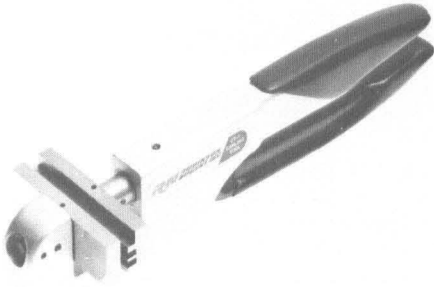
Note 2 — Impedance, capacitance, inductance, and propagation delay were measured Ground-Signal-Ground on a time-domain reflectometer. Ground Plane cable was measured Signal-Ground Plane.

Note 3 — 10f (3 m) sample used, measured at 500 V.

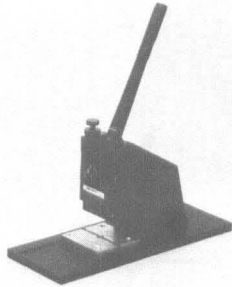
Note 4 — Maximum storage temperature for unterminated bulk cable is 120°F (50°C).

ASSEMBLY TOOLING

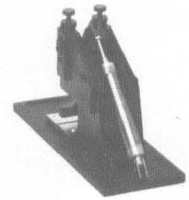
- Hand-held tool
- Bench-mounted tool
- Interchangeable base plates compatible with other presses



CT-4



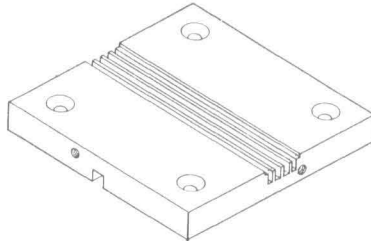
CT-4A



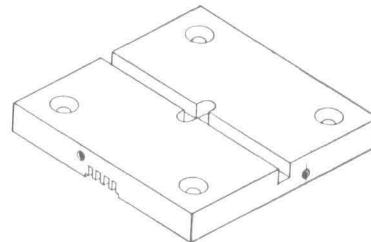
Tool Number CT-1
Hand held crimp tool for assembling IDS, IDP and IDT Series.

Bench mounted crimp tool for all IDC products. Press supplied without base plates.

Bench mounted crimp tool with pneumatic air cylinder for all IDC products. Press supplied without base plates.



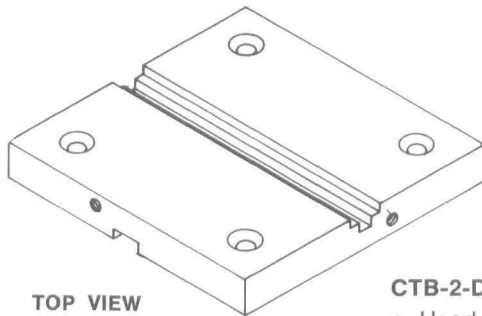
TOP VIEW



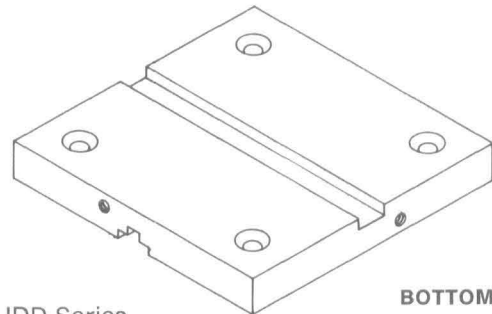
BOTTOM VIEW

CTB-2-PTS

- Used for IDP, IDT and IDS Series plug, transition and socket connectors.
- Cable Guide supplied.
- Location holes compatible with 3M Presses.



TOP VIEW

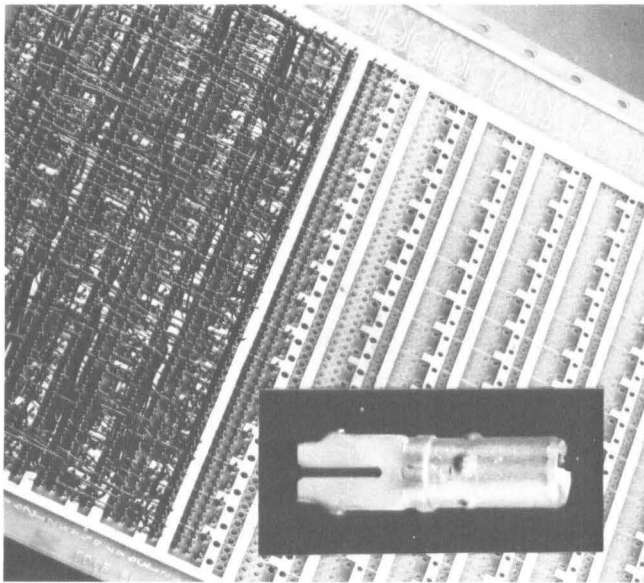


BOTTOM VIEW

CTB-2-DE

- Used for IDE and IDD Series.
- Cable Guide supplied.
- Location holes compatible with 3M Presses.

QUICK/CONNECT



ADVANTAGES

Quick/Connect boards have several advantages over wrap pin boards. The Quick/Connect boards allow faster wiring and higher board density (two Q/C terminations equal four wrap pins). There are fewer wires to cut with Q/C, since daisy-chain requires no cutting and an extra wire may be addressed to each pin. Due to the low profile of the board, the Q/C system approaches standard PC board density and may save up to 60% in cabinet space over wrap boards on some applications. A major advantage for prototype work is the fact that the Q/C board may be reused many times without degrading the integrity of the trace or the quality of the termination. (See Test Data for further reliability data.)

FEATURES

The insulation displacement technique saves wire and eliminates the need to strip. The "Wirestop" feature has a twofold benefit in that it prevents accidental wire cutting and it also prevents the IC leads from unseating the terminated wire. Another beneficial feature is the built-in strain relief that prevents wire breakage. For safety and ease of handling, Q/C sockets and terminals are available on reels.

PRODUCTS

Three configurations are offered:

1. Universal socketboards ready for immediate wiring.
2. Custom boards fully loaded to customer specifications.
3. Individual sockets and terminals for PC board insertion at the customers facility.

TOOLING

All tooling necessary for socket-to-PC board insertion is available from Robinson Nugent. The Tooling section gives complete product information and instructions on tools for Quick/Connect.

QC-5068-175-X

SOCKETS

The sockets consist of industry standard high reliability four-finger BeCu contacts assembled in a formed BeCu sleeve. The tine has a chamfer design that provides strain relief for the wire, and assures *gas tight* reliability. The socket also has a wire stop designed to prevent over-insertion in the tine and keeps the IC lead from unseating the wire. The tine will accept two 30 ga wires.

FINISH:

Socket:

Suffix GG30

10 μ inch (.254 μ m) min. Gold over
50 μ inch (1.27 μ m) Nickel on shell,

30 μ inch (.762 μ m) min. Gold over
75 μ inch (1.91 μ m) min. Nickel on
contact

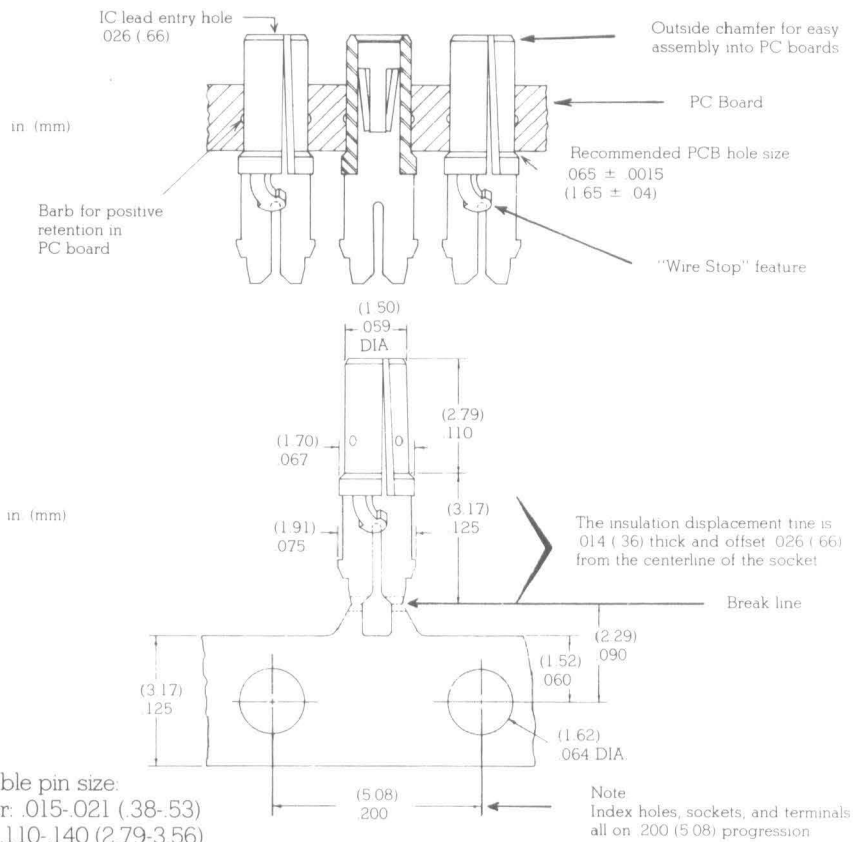
Suffix TG30

200 μ inch (5.08 μ m) min. Tin on shell,

30 μ inch (.762 μ m) min. Gold over
75 μ inch (1.91 μ m) min. Nickel on
contact.

MATERIALS:

Socket contact and shell: Beryllium
Copper



QC-176-X

TERMINALS

The Quick/Connect terminal is used to terminate wires to any type of standard input/output configuration and to distribute power and ground throughout the Quick/Connect board. The tine end of the terminal is designed with chamfered edges to assure *gas tight* reliability and provide strain relief for the wire. The terminal is designed to press fit into a .035" diameter plated through PC board hole. The compliant terminal can be press fit from the back side into plated through holes or can be soldered to pads on the PC board.

FINISH:

Terminal:

Suffix G

10 μ inch (.259 μ m) min. Gold over
50 μ inch (1.27 μ m) min. Nickel.

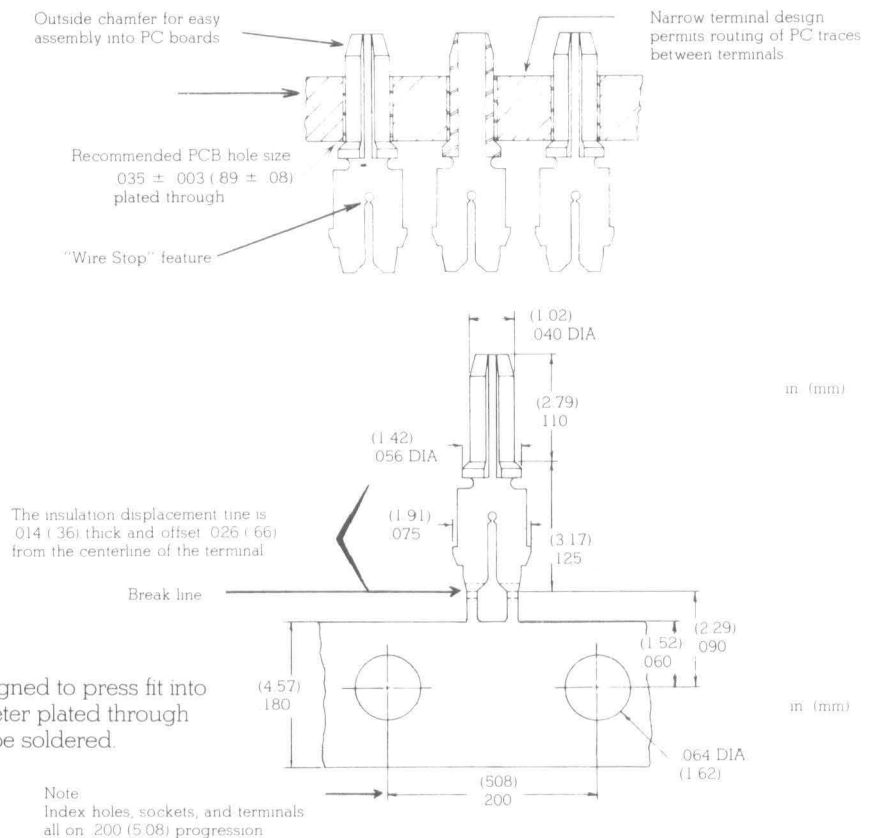
Suffix T

200 μ inch (5.08 μ m) min. Tin.

MATERIALS:

Terminal: Beryllium Copper

Terminal is designed to press fit into
.035 (.89) diameter plated through
holes or it can be soldered.

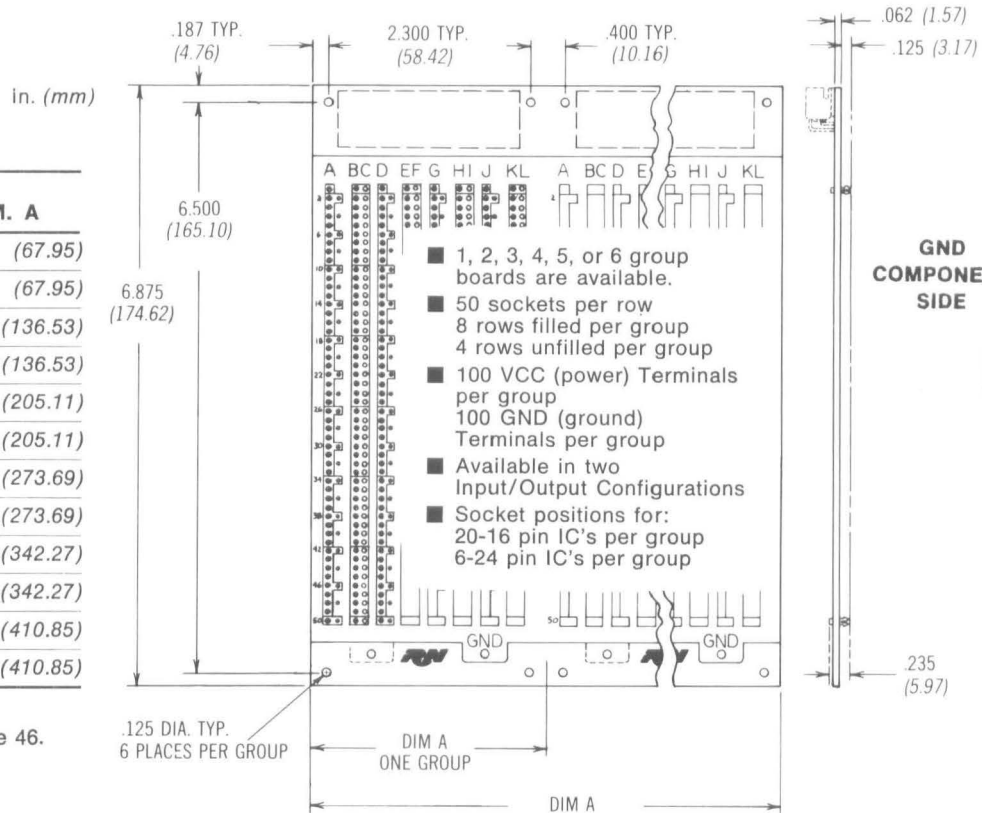


WQC-SERIES SOCKETBOARDS

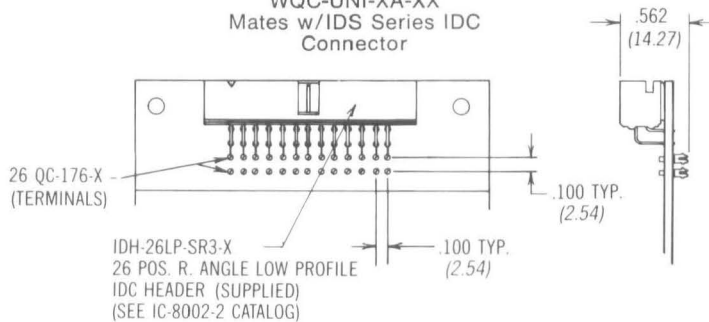
- Uses QC-5068-175-X Sockets and QC-176-X Terminals
- Universal Socket Pattern Accepts 0.3" and 0.6" Dips. 0.4" Spacing Available Upon Request
- Uses Insulation Displacement Techniques for Wiring
- Available in Two I/O Configurations (See Details A & B)

Part No.	No. of Groups	I/O Detail	DIM. A
WQC-UNI-1A-X	1	A	2.675 (67.95)
WQC-UNI-1-X	1	B	2.675 (67.95)
WQC-UNI-2A-X	2	A	5.375 (136.53)
WQC-UNI-2-X	2	B	5.375 (136.53)
WQC-UNI-3A-X	3	A	8.075 (205.11)
WQC-UNI-3-X	3	B	8.075 (205.11)
WQC-UNI-4A-X	4	A	10.775 (273.69)
WQC-UNI-4-X	4	B	10.775 (273.69)
WQC-UNI-5A-X	5	A	13.475 (342.27)
WQC-UNI-5-X	5	B	13.475 (342.27)
WQC-UNI-6A-X	6	A	16.175 (410.85)
WQC-UNI-6-X	6	B	16.175 (410.85)

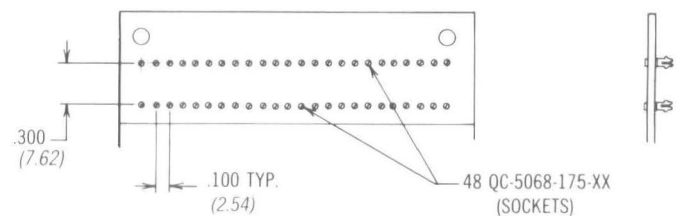
X — Denotes plating options.
See materials and finish specifications on page 46.



DETAIL "A"
I/O Configuration For
WQC-UNI-XA-XX
Mates w/IDS Series IDC
Connector

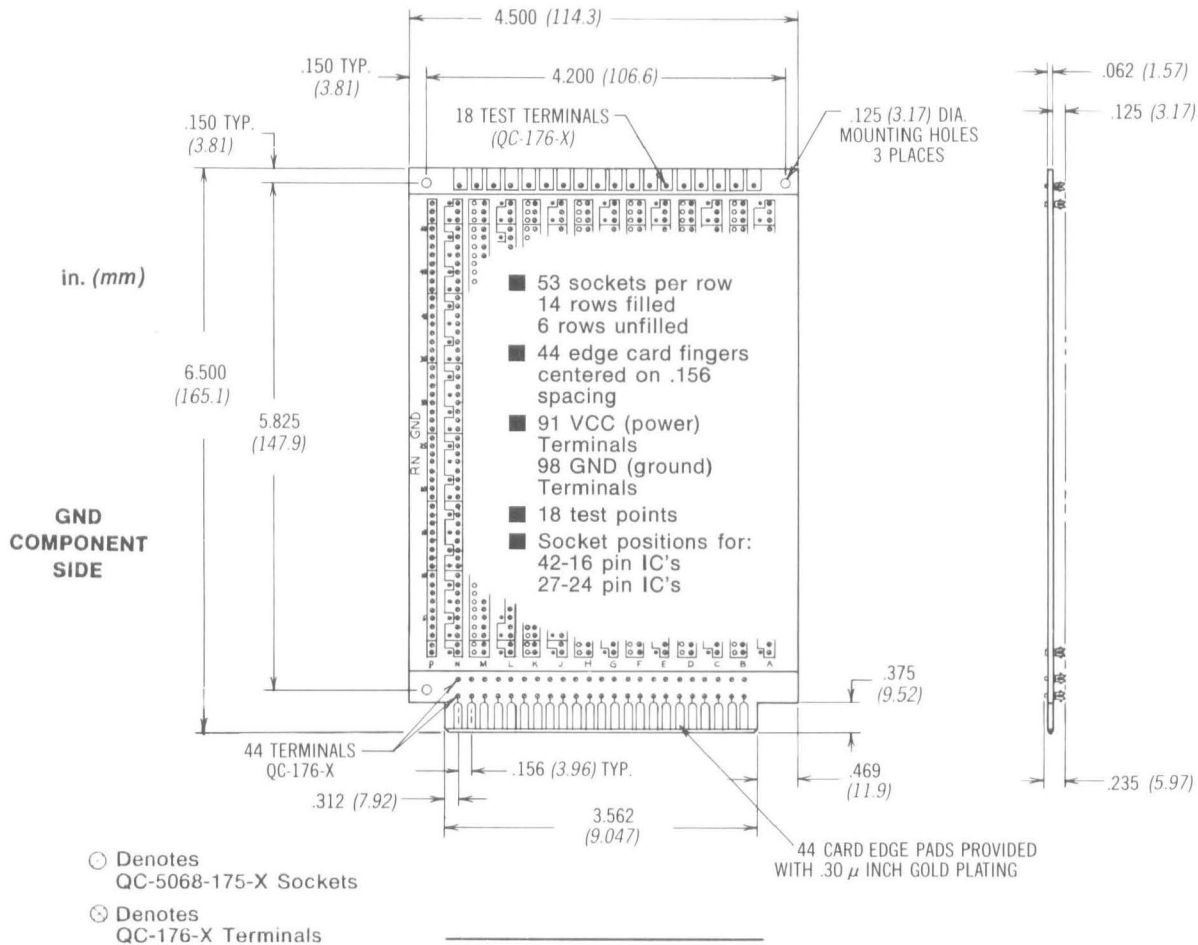


DETAIL "B"
I/O Configuration For
WQC-UNI-X-XX
Mates w/IDP Series IDC Plug



VQC-SERIES SOCKETBOARDS

- Uses QC-5068-175-X Sockets and QC-176-X Terminals
- Universal Socket Pattern Accepts 0.3" and 0.6" Dips. 0.4" Spacing Available Upon Request
- Uses Insulation Displacement Techniques for Wiring
- I/O realized by 44 Card Edge Fingers on .156" Spacing



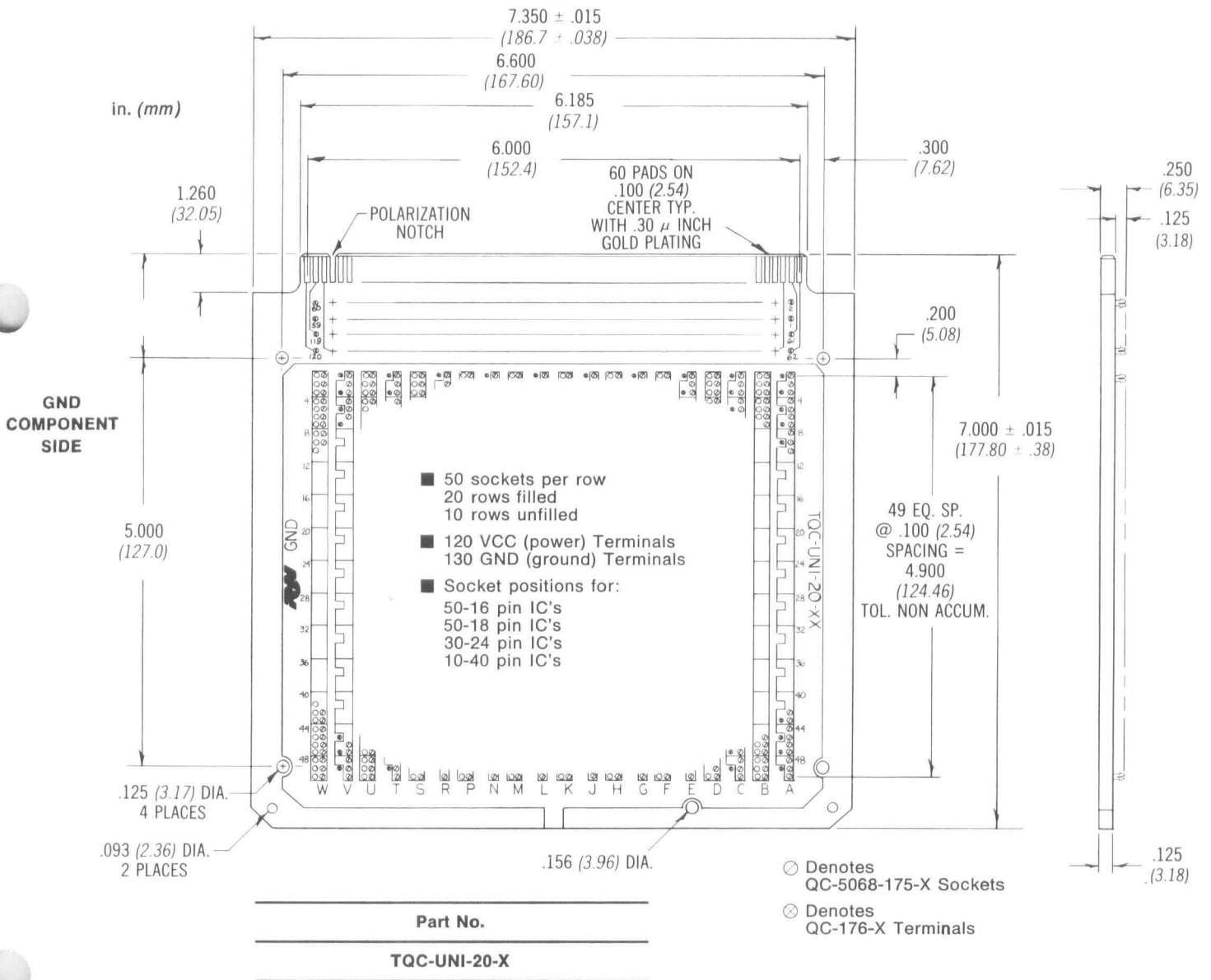
Part No.

VQC-UNI-14-X

X — Denotes plating options.
See materials and finish specifications on page 46.

TQC-SERIES SOCKETBOARDS

- Uses QC-5068-175-X Sockets and QC-176-X Terminals
- Universal Socket Pattern Accepts 0.3" and 0.6" Dips. 0.4" Spacing Available Upon Request
- Uses Insulation Displacement Techniques for Wiring
- Card Edge Finger I/O Standard

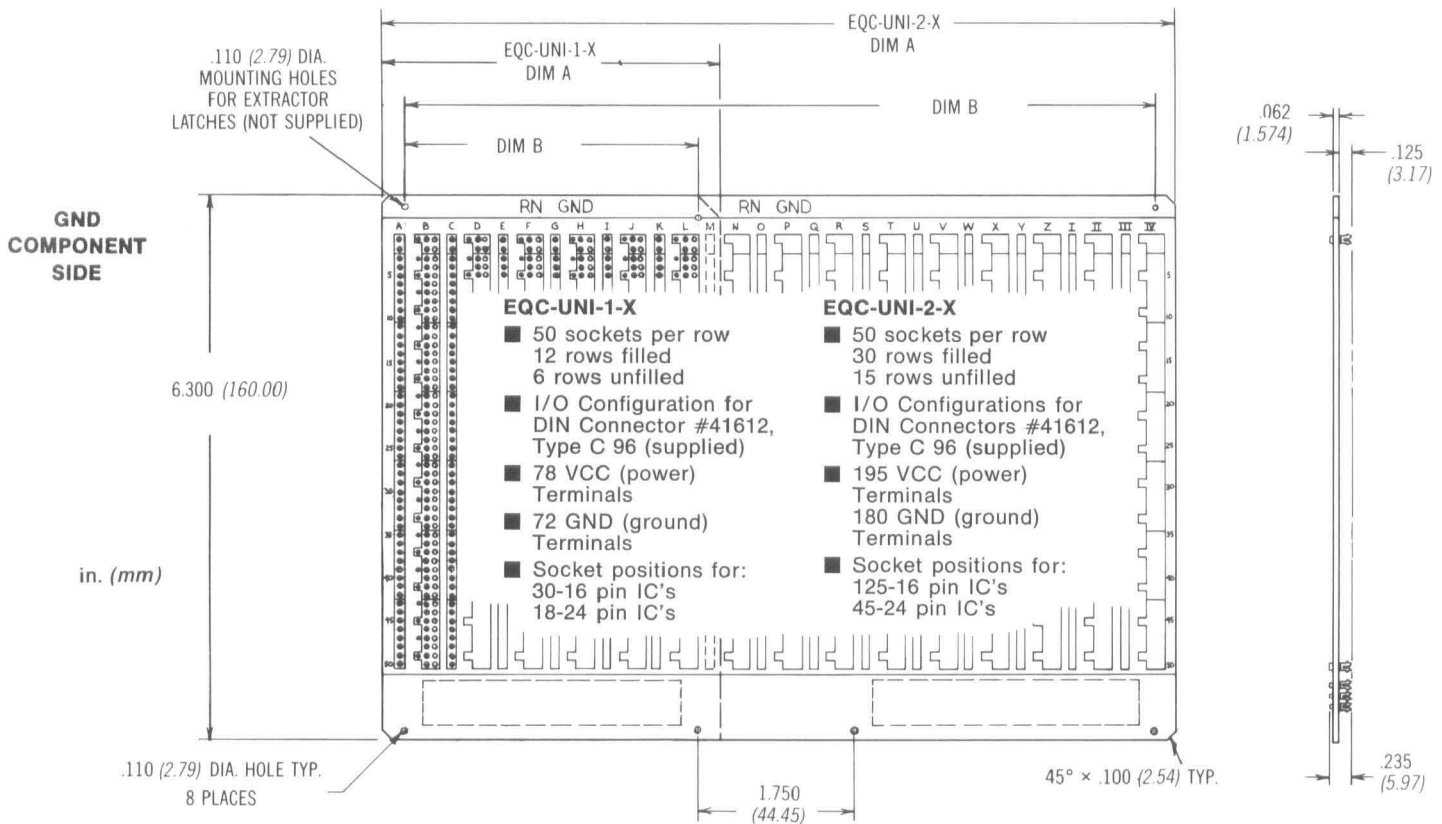


X — Denotes plating options.
See materials and finish specifications on page 46.

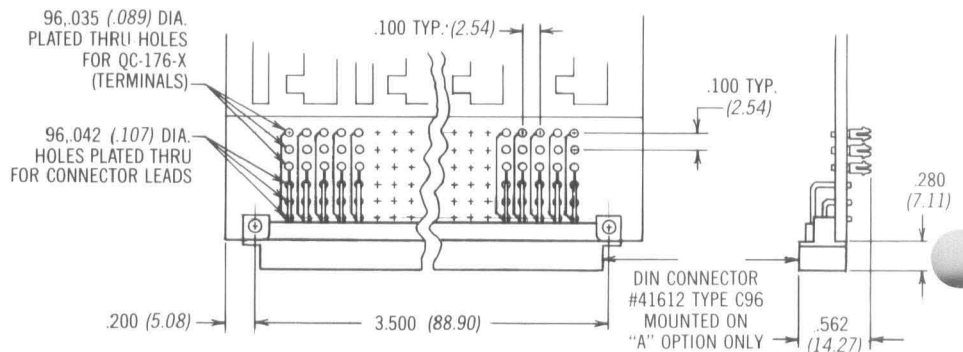
EQC-SERIES SOCKET BOARDS

EUROCARD

- Uses QC-5068-175-X Sockets and QC-176-X Terminals
- Universal Socket Pattern Accepts 0.3" and 0.6" Dips. 0.4" Spacing Available Upon Request
- Uses Insulation Displacement Techniques for Wiring
- I/O Configuration, DIN Connectors #41612, Type C 96 Supplied On "A" Version



DETAIL FOR I/O CONNECTOR



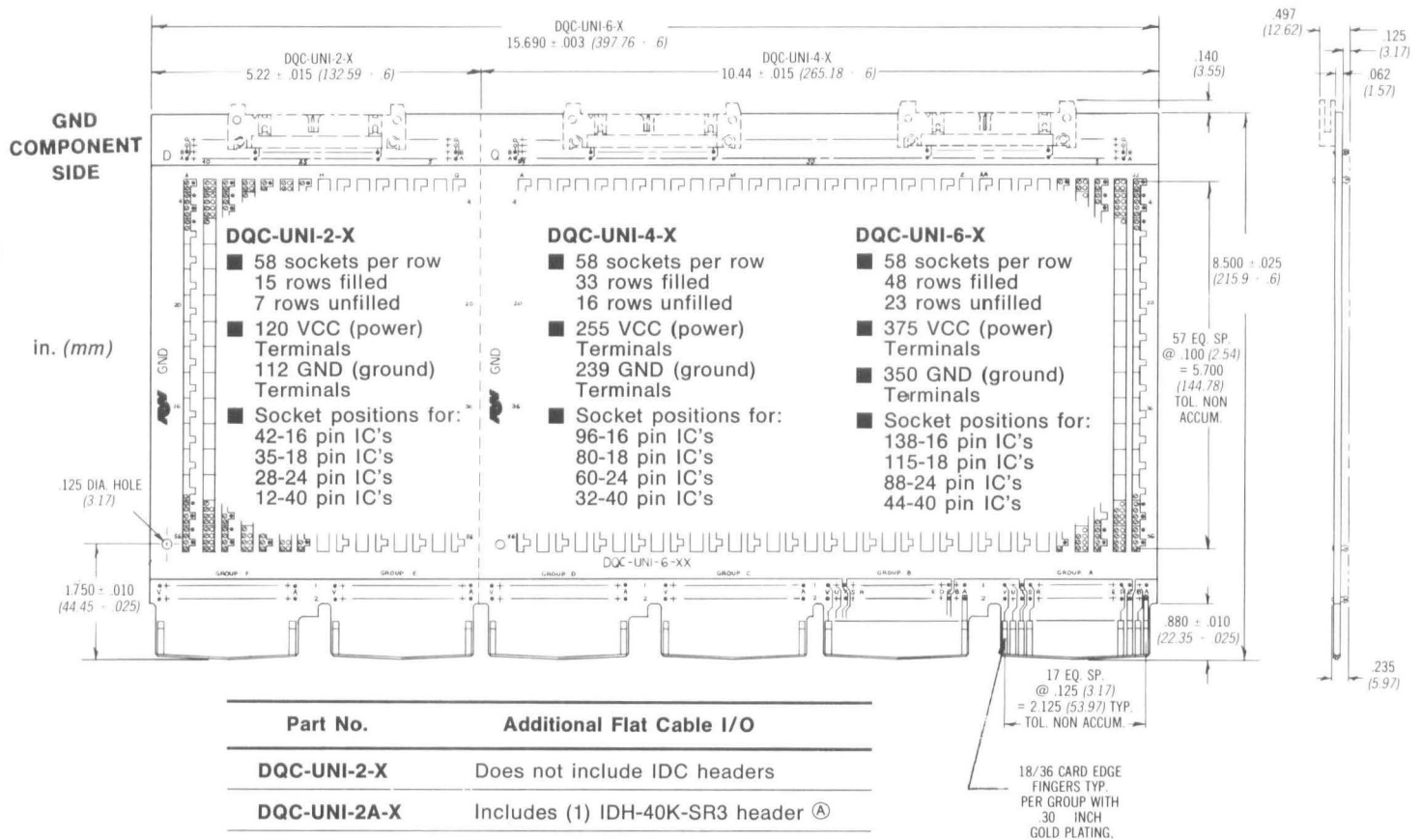
Part No.	DIM. A	DIM. B
EQC-UNI-1-XX	3.900 (99.06)	3.500 (88.90)
EQC-UNI-1A-XX	3.900 (99.06)	3.500 (88.90)
EQC-UNI-2-XX	9.189 (233.40)	8.750 (222.25)
EQC-UNI-2A-XX	9.189 (233.40)	8.750 (222.25)

X — Denotes plating options.
See materials and finish specifications on page 46.

DQC-SERIES SOCKETBOARDS

* DEC *Computer Interface*

- Uses QC-5068-175-X Sockets and QC-176-X Terminals
- Universal Socket Pattern Accepts 0.3" and 0.6" Dips. 0.4" Spacing Available Upon Request
- Uses Insulation Displacement Techniques For Wiring
- Available in Dual, Quad, or Hex Configurations
- Card Edge Finger I/O Standard
- Flat Cable I/O Headers Supplied On "A" Version Designed To Accept Mil. Standard IDC Sockets
- Numerous I/O Mounting Holes Provided for Custom Header Arrangements



Part No.	Additional Flat Cable I/O
DQC-UNI-2-X	Does not include IDC headers
DQC-UNI-2A-X	Includes (1) IDH-40K-SR3 header (A)
DQC-UNI-4-X	Does not include IDC headers
DQC-UNI-4A-X	Includes (2) IDH-40K-SR3 headers (A)
DQC-UNI-6-X	Does not include IDC headers
DQC-UNI-6A-X	Includes (3) IDH-40K-SR3 headers (A)

- Denotes QC-5068-175-X Sockets
- ⊗ Denotes QC-176-X Terminals

X — Denotes plating options. See materials and finish specifications on Page 46.

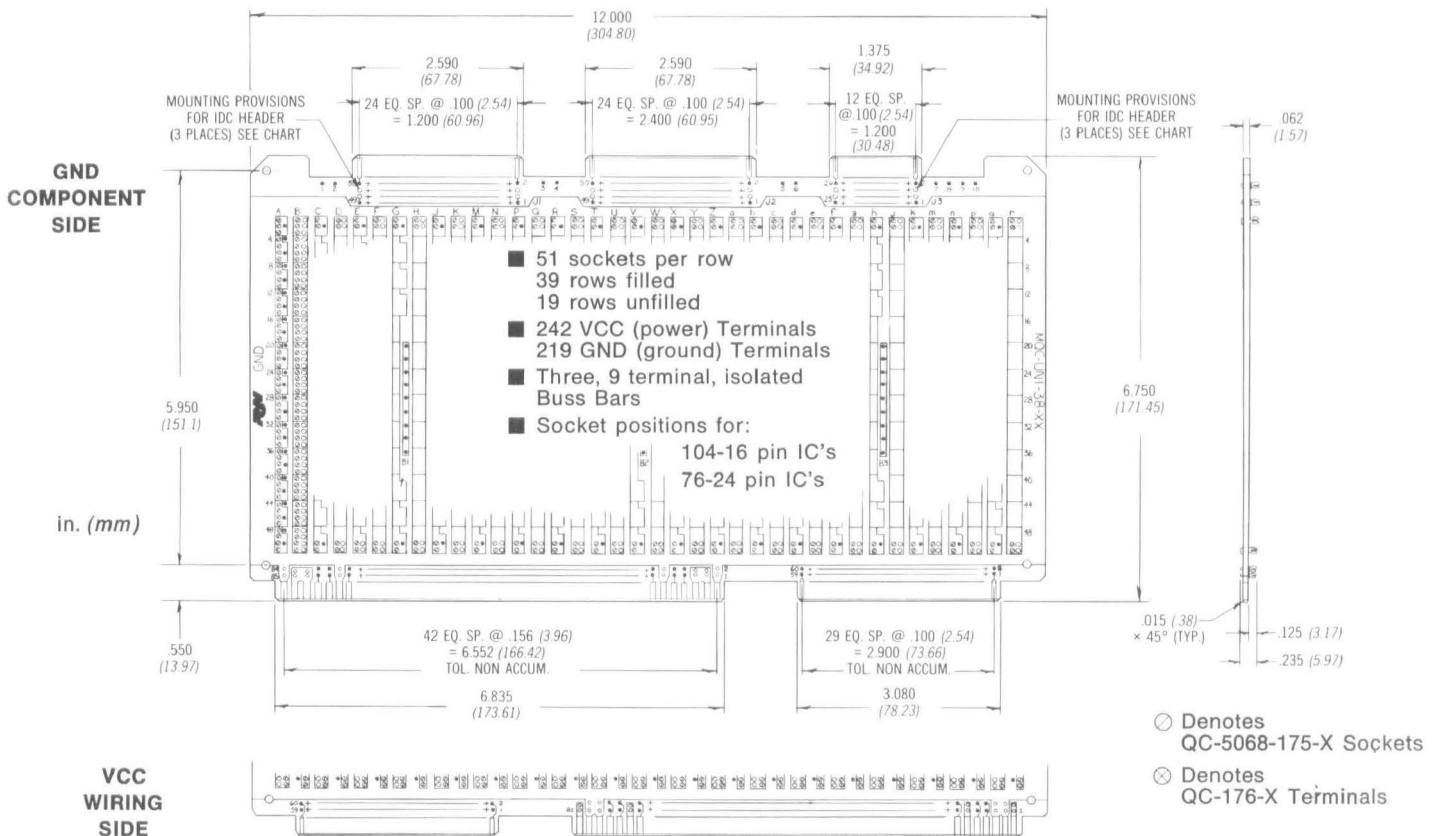
(A) Ejector Latches available upon request; specify EL-1K for IDC Socket with strain relief
EL-2K for IDC Socket without strain relief.

*Trademark of Digital Equipment Corp.

MQC-SERIES SOCKETBOARDS

* *INTEL Multibus*

- Uses QC-5068-175-X Sockets and QC-176-X Terminals
- Universal Socket Pattern Accepts 0.3" and 0.6" Dips. 0.4" Spacing Available Upon Request
- Uses Insulation Displacement Technique for Wiring
- Card Edge Finger I/O Standard
- Flat Cable I/O Headers Supplied On "A" Version Designed To Accept Mil. Standard IDC Sockets



Part No.	I/O Configuration
MQC-UNI-38-X	Card Edge fingers Gold Plated 30 μ in.
MQC-UNI-38A-X	(2) IDH-50PK-SR3-TG and (1) IDH-26PK-SR3-TG flat cable headers supplied (A).

X — Denotes plating options. See materials and finish specifications on page 46.

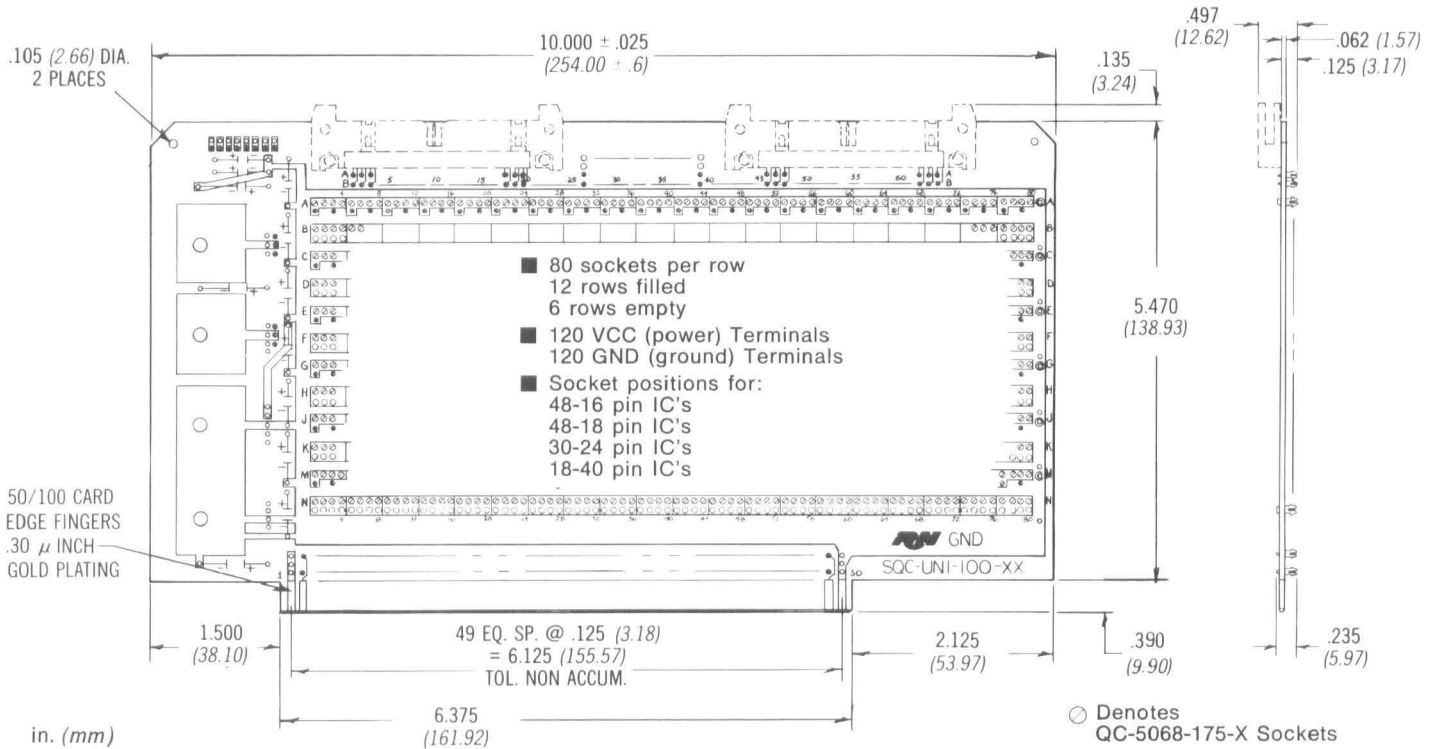
(A) — Ejector/Latches available upon request; specify
EL-1K for IDC Socket with strain relief
EL-2K for IDC Socket without strain relief.

*Trademark of Intel Corp.

SQC-SERIES SOCKETBOARDS

S-100-Buss Interface

- Uses QC-5068-175-X Socket and QC-176-X Terminals
- Universal Pattern Accepts 0.3" and 0.6" Dips. 0.4" Spacing Available Upon Request
- Uses Insulation Displacement Techniques for Wiring
- Card Edge Finger I/O Standard
- Many IDC Header Interface Options Available (See Part No. Descriptions)
- Design Incorporates Split Power Buss



- Denotes QC-5068-175-X Sockets
- Denotes QC-176-X Terminals

Part Nos.	I/O Configuration
SQC-UNI-100-X	Not supplied with IDC headers (128 holes provided)
SQC-UNI-100A-X	Supplied with (2) IDH-40PK-SR3-TG flat cable I/O headers (A).

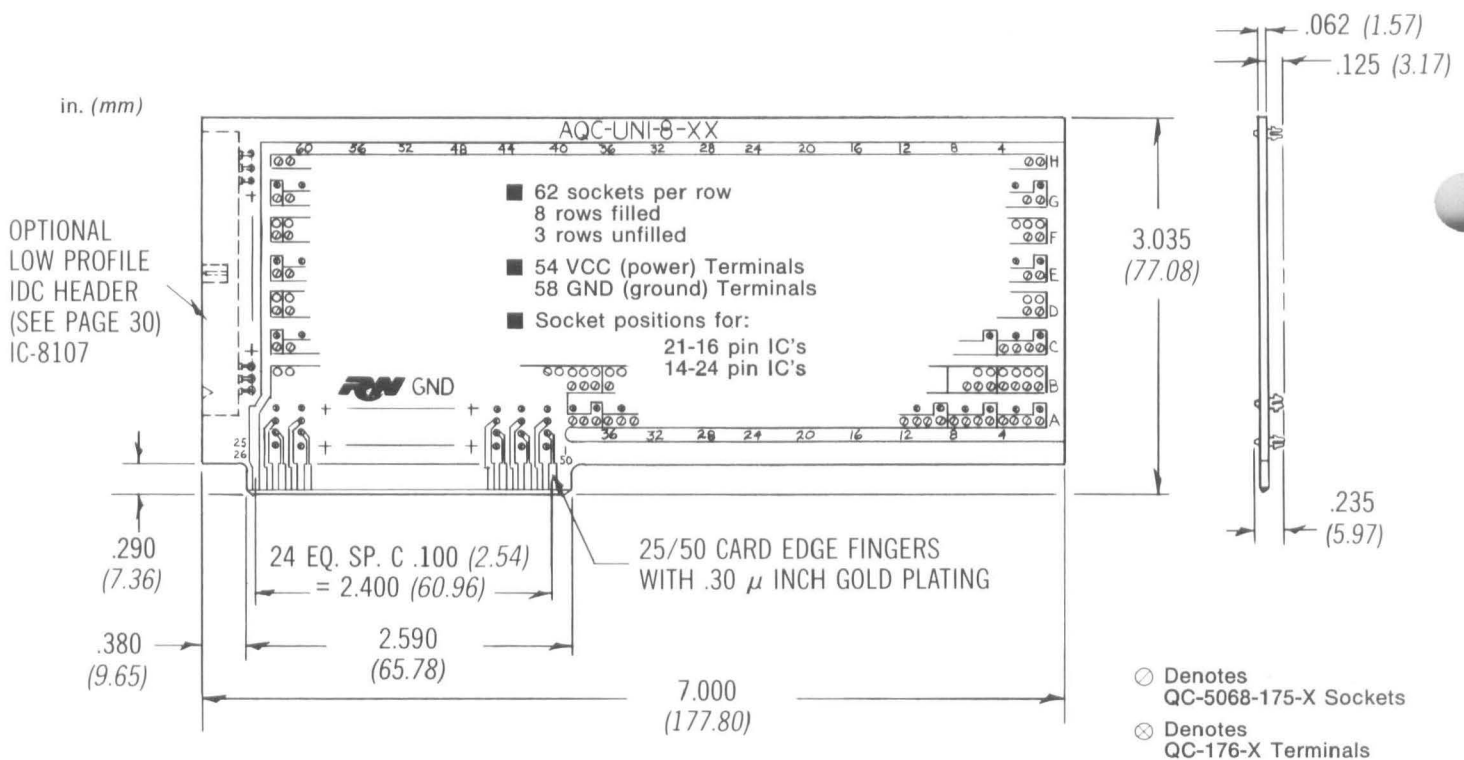
X — Denotes plating options. See materials and finish specifications on page 46.

(A) — Ejector Latches available upon request; specify EL-1K for IDC Socket with strain relief
EL-2K for IDC Socket without strain relief.

AQC-SERIES SOCKETBOARDS

* *APPLE II Interface*

- Design Apple Peripheral Cards The Quick Connect Way
- Uses Insulation Displacement Techniques for Wiring
- Uses QC-5068-175-X Sockets and QC-176-X Terminals
- Universal Socket Pattern Accepts 0.3" and 0.6" Dips. 0.4" Spacing Available Upon Request.
- Card Edge Finger I/O Standard



Part Nos.	I/O Configuration
AQC-UNI-8-X	Not Supplied with IDC Header (40 holes provided)
AQC-UNI-8A-X	Supplied with (1) 40 pos. Low Profile IDC Header

X — Denotes plating options.
See materials and finish specifications on page 46.

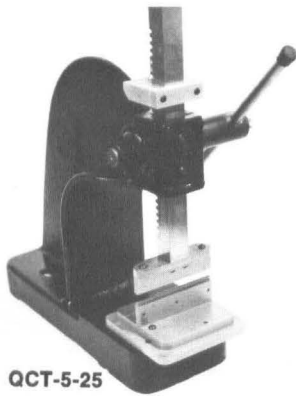
*Trademark for Apple Computer Inc.

Q/C TOOLING

SOCKET-TO-PCB INSERTION

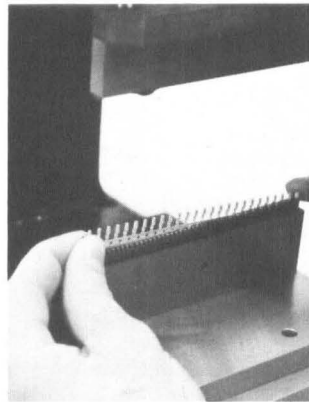
To insert Quick/Connect sockets (or terminals) into a PC board, the following procedures should be followed:

- 1** Place the alignment tool supplied with die set in the bottom die and lower the top tool to check the die set for parallel and vertical alignment. Adjustment screws are provided in the base plate.
- 2** Cut a strip of up to 25 sockets or terminals from the reel and align them in the bottom half of the die set. Be careful that the socket wire stop is nested in the relief provided in the bottom die set.
- 3** Place the PC board over the sockets being careful that each socket is aligned to a hole. There is an outside chamfer on the socket to help guide it into the PC board hole.
- 4** Close the arbor press and apply pressure until the sockets are fully inserted. The socket shoulder will seat against the back of the PC board.
- 5** Remove the board from the press and carefully break off the carrier strip at the break line using thumb pressure or pliers.
- 6** The sockets are on 0.2" progression, therefore steps 2, 3 and 4 must be repeated until the PC board is fully loaded.
- 7** The QCT-4, single insertion tool, is designed to insert single sockets or single terminals into PC boards.

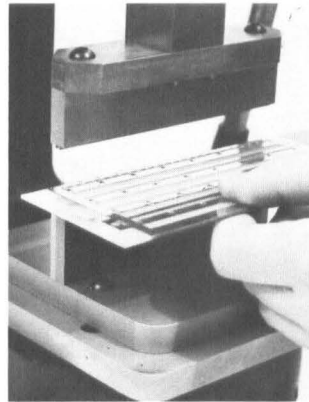


QCT-5-25

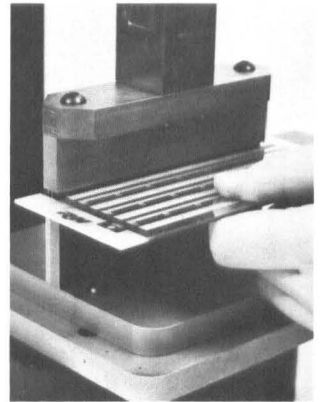
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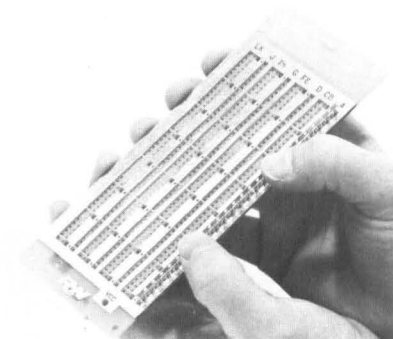
2



3



4



5

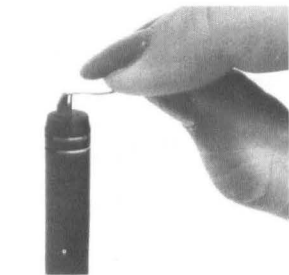


QCT-4

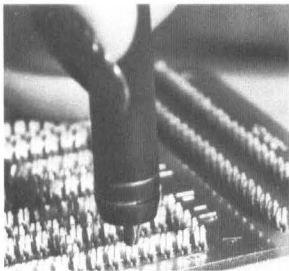
7

WIRING

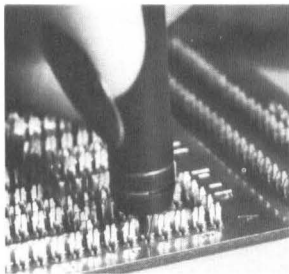
To wire Quick/Connect sockets and terminals the following procedure should be followed:



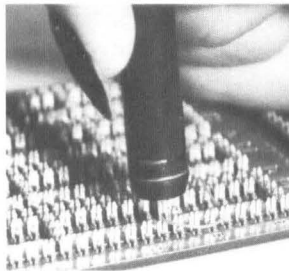
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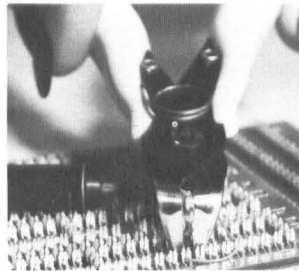
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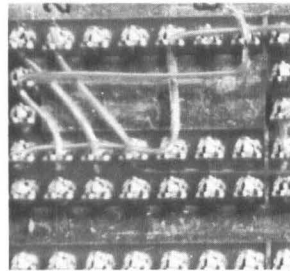
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4



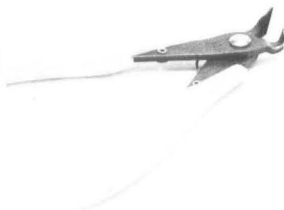
5



6



Pencil
QCT-1



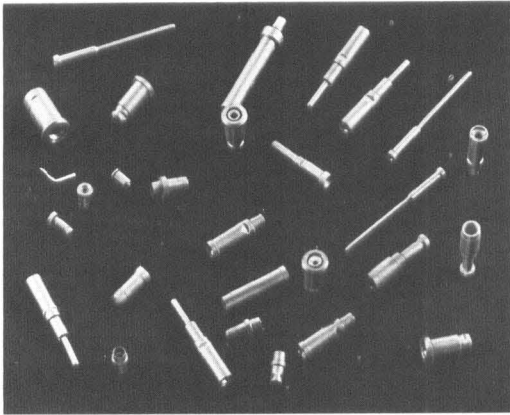
Cutters
QCT-2



Wire
QCW-30

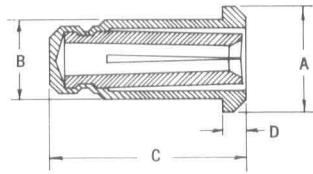
PIN SOCKETS

PIN SOCKETS

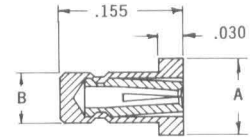


THE STANDARD OF THE INDUSTRY — RN offers hundreds of standard styles using unique machined beryllium copper locked into a machined brass shell for high reliability even in airborne applications. Contact life on some styles is many thousand cycles. Sizes range from .070 in diameter and from .150 on length; accept lead diameters from .010" to .100" and lengths from .050 with either open or closed entry and an open or closed terminal end. May be mounted on spacings from .100" in PCB's or panels by wave or hand soldering, or mechanical swaging, riveting, flaring or simply press-fit lock.

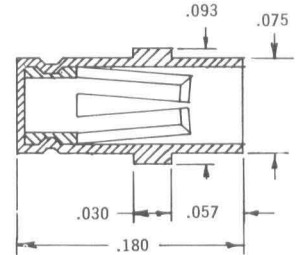
The original RN pin socket provides extra reliability for plug-in mounting of all lead-type packages where serviceability, maintenance and solder heat protection is important. Extensively used in component test and bread boarding.



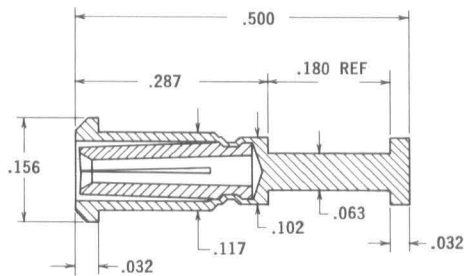
PART	Lead Dia. Min.-Max.	Lead Length Min.-Max.	A	B	C	D
NS-431-A2	.048-.054	.093-.250	.156	.117	.287	.032
NS-431-B1	.036-.040	.093-.250	.156	.117	.287	.032
NS-431-C1	.026-.030	.093-.250	.156	.117	.287	.032
NS-431-D1	.056-.060	.093-.250	.156	.117	.287	.032
NS-441-A2	.048-.054	.093-.250	.110	.096	.287	.032
NS-441-B1	.036-.040	.093-.250	.110	.096	.287	.032
NS-441-C1	.026-.030	.093-.250	.110	.096	.287	.032
NS-441-D1	.056-.060	.093-.250	.110	.096	.287	.032
NS-451-A2	.048-.054	.093-.250	.156	.117	.287	.112
NS-451-B1	.036-.040	.093-.250	.156	.117	.287	.112
NS-451-C1	.026-.030	.093-.250	.156	.117	.287	.112
NS-451-D1	.056-.060	.093-.250	.156	.117	.287	.112
NS-432-60	.056-.060	.093-.250	.187	.156	.312	.032
NS-432-65	.061-.065	.093-.250	.187	.156	.312	.032
NS-432-70	.066-.070	.093-.250	.187	.156	.312	.032
NS-432-80	.076-.080	.093-.250	.187	.156	.312	.032
NS-432-90	.086-.090	.093-.250	.187	.156	.312	.032
NS-432-93	.088-.092	.093-.250	.187	.156	.312	.032
NS-432-100	.096-.100	.093-.250	.187	.156	.312	.032
T/S						



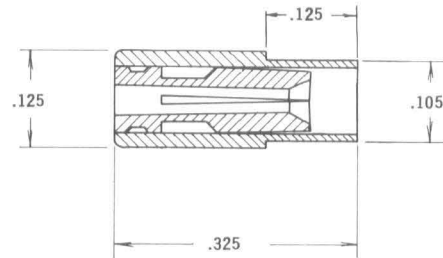
PART	Lead Dia. Min.-Max.	Lead Length Min.-Max.	A	B
NS-430-20	.017-.020	.090-.125	.093	.062
NS-430-25	.022-.025	.090-.125	.093	.062
NS-460-20	.017-.020	.090-.125	.074	.062
NS-460-25	.022-.025	.090-.125	.074	.062
G-N/G-N				
PS-41-84	.035-.042	.090-.125	.085	.075
T/G-N				



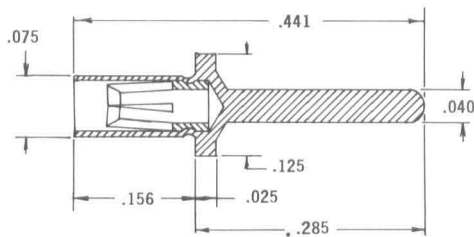
PART	Lead Dia. Min.-Max.	Lead Length Min.-Max.
NS-480-40	.035-.042	.090-.160
T/G-N		



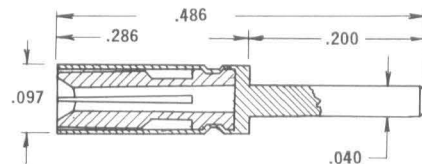
PART	Lead Dia. Min.-Max.	Lead Length Min.-Max.
PS-30-118	.026-.030	.093-.250
PS-40-118	.036-.040	.093-.250
PS-52-118	.048-.054	.093-.250
PS-60-118	.056-.060	.093-.250
T/S		



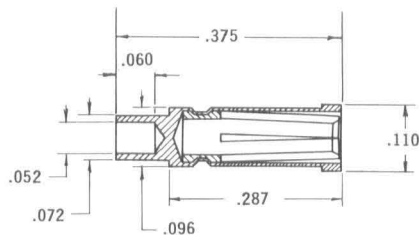
PART*	Lead Dia. Min.-Max.	Lead Length Min.-Max.
PS-30-109	.026-.030	.125 —
PS-40-109	.036-.040	.125 —
PS-50-109	.046-.050	.125 —
PS-52-109	.048-.054	.125 —
PS-60-109	.056-.060	.125 —
T/S		
*SHIPPED UNASSEMBLED		



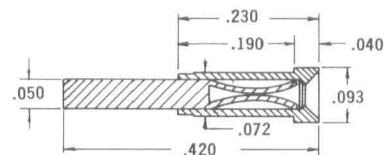
PART	Lead Dia. Min.-Max.	Lead Length Min.-Max.
PS-41-111	.035-.042	.090-.155
G-N/G-N		



PART	Lead Dia. Min.-Max.	Lead Length Min.-Max.
PS-30-100	.026-.030	.093-.250
PS-40-100	.036-.040	.093-.250
PS-52-100	.048-.054	.093-.250
PS-60-100	.056-.060	.093-.250
T/S		



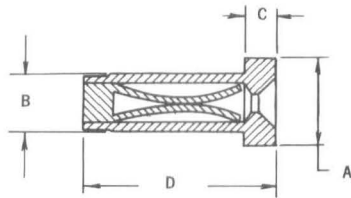
PART	Lead Dia. Min.-Max.	Lead Length Min.-Max.
PS-30-101	.026-.030	.093-.250
PS-40-101	.036-.040	.093-.250
PS-52-101	.048-.054	.093-.250
PS-60-101	.056-.060	.093-.250
T/S		



Part	Lead Dia. Min.-Max.	Lead Lgth. Min.-Max.
PS-303-14	.020-.030	.125-.156
G-N/G-N		

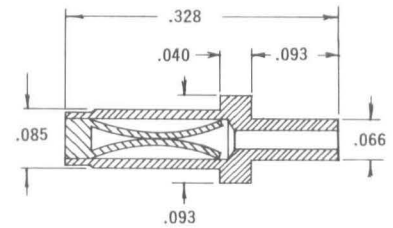
PIN SOCKETS

PIN SOCKETS (cont')



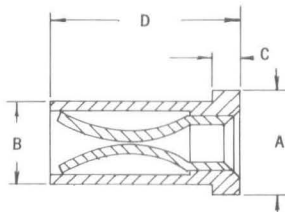
PART	Lead Dia. Min.-Max.	Lead Length Min.-Max.	A	B	C	D
PS-256-13	.015-.020	.125-.165	.093	.062	.030	.200
PS-258-18	.020-.025	.095-.140	.093	.062	.040	.175
PS-301-14	.020-.030	.130-.175	.093	.072	.040	.230
PS-301-43	.020-.030	.150-.190	.110	.085	.040	.240
PS-302-15	.020-.030	.185-.343	.093	.072	.040	.410
PS-304-72	.020-.030	.125-.165	.093	.072	.025	.200
PS-402-44	.030-.040	.145-.185	.105	.085	.040	.235
PS-402-33	.030-.040	.145-.185	.093	.085	.040	.235
PS-403-30	.020-.040	.200-.350	.093	.085	.030	.425
PS-404-40-1	.017-.030	.200-.265	.110	.085	.020	.315
PS-404-40-2	.030-.040	.200-.265	.110	.085	.020	.315

G-N/G-N



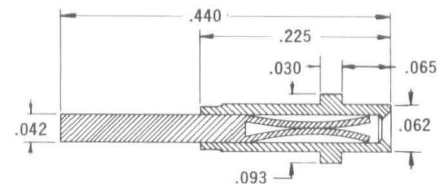
PART	Lead Dia. Min. Max.	Lead Length Min. Max.
PS-402-34	.030-.040	.200-.250

G-N/G-N



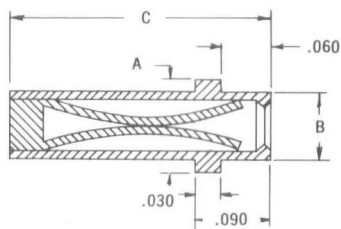
PART	Lead Dia. Min.-Max.	Lead Lgth. Min.-Max.	A	B	C	D
PS-2515-51	.015-.020	.125 —	.093	.062	.030	.200
PS-3013-62	.020-.030	.125 —	.093	.070	.030	.200
PS-401-75	.020-.040	.215 —	.093	.085	.040	.408
PS-406-63	.030-.040	.125 —	.110	.086	.030	.200

G-N/G-N



PART	Lead Dia. Min.-Max.	Lead Length Min.-Max.
PS-252-23	.015-.020	.125-.190

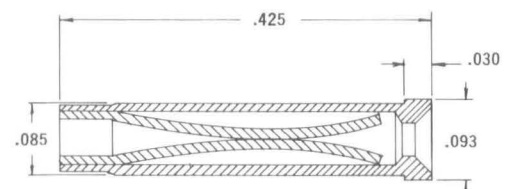
G-N/G-N



PART	Lead Dia. Min.-Max.	Lead Length Min.-Max.	A	B	C
PS-256-9	.015-.020	.125-.165	.090	.062	.200
PS-304-29	.020-.030	.125-.165	.093	.072	.200
PS-404-68	.020-.040	.175-.265	.110	.084	.315

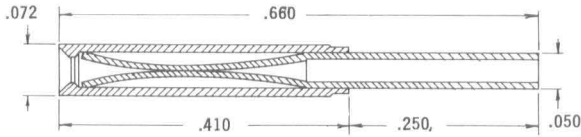
Note: Chamfer formed when part is staked into board.

G-N/G-N

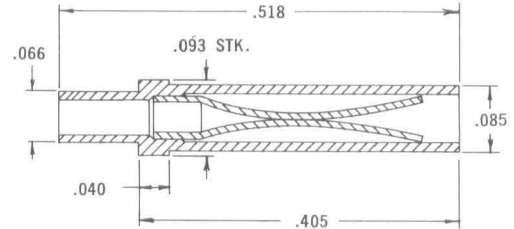


PART	Lead Dia. Min.-Max.	Lead Length Min.-Max.
PS-401-30	.025-.040	.225 —

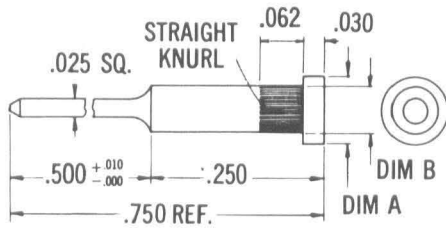
G-N/G-N



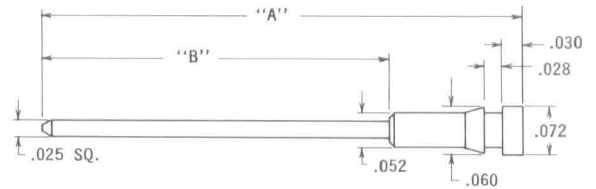
PART	Lead Dia. Min.-Max.	Lead Length Min.-Max.
PS-3010-59	.020-.030	.175- —
G-N/G-N		



PART	Lead Dia. Min.-Max.	Lead Length Min.-Max.
PS-401-76	.020-.040	.350- —
G-N/G-N		



Part No.	A	B	Min-Max Pin Dia.	Recommended Mounting Hole Tolerance: $+.001 / -.002$ TYP
PS-5026-119-3	.080	.068	.024-.029	.070
PS-5026-119-5	.110	.078	.030-.038	.080
PS-5026-119-6	.115	.085	.039-.042	.088
G-N/G-N				

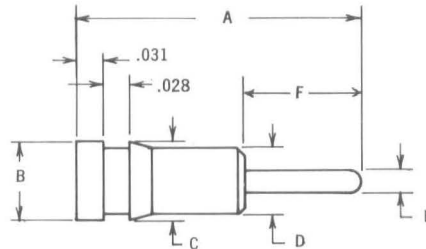


PART	Lead-Dia. Min.-Max.	Lead Length Min.-Max.	A	B	Plating
PS-5047-125	.016-.021	.125-.175	.563	.370	G-N/G-N
PS-5047-125-T	.016-.021	.125-.175	.563	.370	T/G-N
PS-5047-126	.016-.021	.125-.175	.703	.510	G-N/G-N
PS-5047-126-T	.016-.021	.125-.175	.703	.510	T/G-N

Recommended Mounting Hole — .055 Dia.

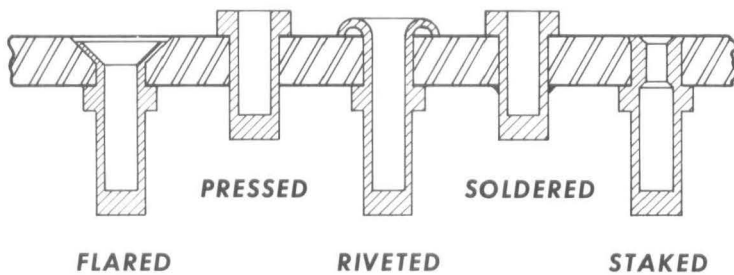
PIN SOCKETS

PIN SOCKETS (con't)



PART	Lead Dia. Min.-Max.	Lead Length Min.-Max.	A	B	C	D	E	F	Plating
PS-5047-142	.016-.021	.110-.150	.290	.072	.062	.053	.020	.125	G-N/G-N
PS-5047-142-T	.016-.021	.110-.150	.290	.072	.062	.053	.020	.125	T/G-N
PS-5047-143	.016-.021	.110-.150	.447	.072	.062	.051	.018	.282	G-N/G-N
PS-5047-143-T	.016-.021	.110-.150	.447	.072	.062	.051	.018	.282	T/G-N
PS-5047-144	.016-.021	.110-.150	1.000	.072	.062	.051	.018	.175	G-N/G-N
PS-5047-144-T	.016-.021	.110-.150	1.000	.072	.062	.051	.018	.175	T/G-N
PS-5047-145	.016-.021	.110-.150	1.300	.072	.062	.051	.018	.175	G-N/G-N
PS-5047-145-T	.016-.021	.110-.150	1.300	.072	.062	.051	.018	.175	T/G-N

Recommended Mounting Hole — .055 Dia.



INSTALLATION TOOLS

To order installation tooling for any Robinson Nugent Pin-Socket, specify the socket and the method desired to mount in the panel (flared, pressed, riveted, soldered, or staked) and the thickness of panel to be used. All tool sets consist of arbor with .311 dia. shank and base with .375 shank to fit all standard air and arbor assembly presses.

SPECIFICATIONS

MATERIALS:

Socket Shell — ½ Hard Brass, Composition 22 per Fed Spec. QQ-B-626.

Socket Contact — Beryllium Copper Alloy 25, Spring-Temper, per Fed. Spec. QQ-C-530a.

FINISHES: The standard plating finish is shown as (Shell Finish)/(Contact Finish) under each chart. For example: "NS-430—" is Plated "Gold-over-Nickel" Shell/Gold-over-Nickel" contact or coded as "G-N/G-N. Any other required finish can be supplied on special order. All finishes specified meet the following specifications and thicknesses:

Gold — Contact, 30 μ inch Min. per MIL-G-45204, Class 1.

— Shell, 10 μ inch Min.

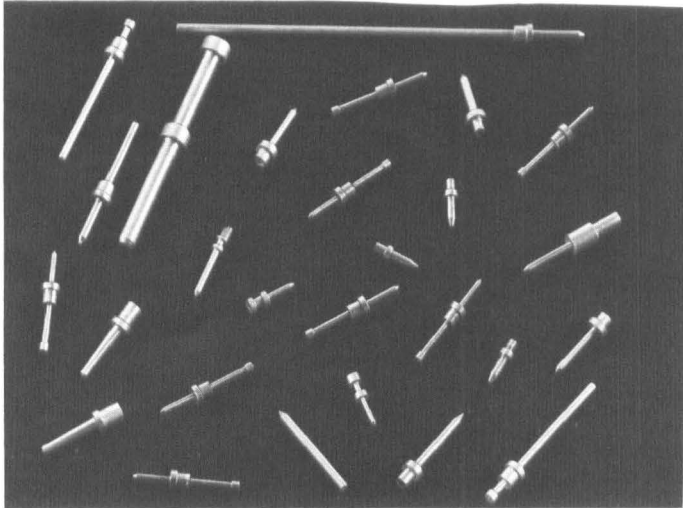
Silver — 50 μ inch Min. per QQ-S-365a.

Nickel — 50 μ inch Min. per QQ-N-290, Class 2.

Tin — 200 μ inch Min. per MIL-T-10727, Type 1.

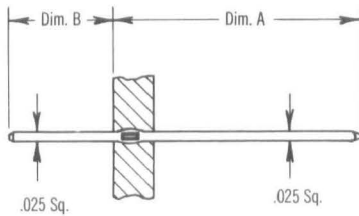
TEST DATA: Representative pin sockets have been successfully tested per MIL-STD-202A as follows: Temperature cycle, Method 102A, Test Cond. C; Moisture resistance, Method 106; Shock test, Method 202. Also Vibration tests per MIL-S-19500 (40.20); Humidity tests per MIL-E-5272 and aged 1000 hours at 150°C. Current carrying capacity will vary with the physical size of any particular socket. The smaller sockets will carry 10 Amps Max. continuous; the larger will carry 20 Amps Max. continuous. Full details on any specific socket available on request.

TERMINALS



Designed to be compatible with and mate with standard pin sockets to form miniature connector assemblies, as well as conventional terminal applications. Many unusual configurations and materials are standard.

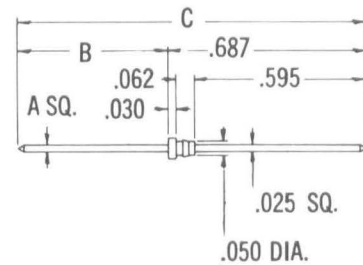
WIRE WRAP



Part No.	Dim. A	Dim. B
CP-105-1-X	.500	—
CP-105-2-X	.625	—
CP-105-3-X	.750	—
CP-105-4-X	.500	.305
CP-105-5-X	.625	.305
CP-105-6-X	.750	.305

GOLD OR TIN

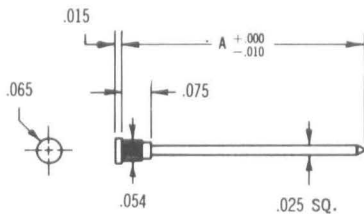
Recommended Mounting Hole — $.034 \begin{matrix} +.0015 \\ -.0005 \end{matrix}$ Dia.



Part No.	A	B	C
CP-122-1	.025	.520	1.207
CP-122-2	—	—	—

GOLD

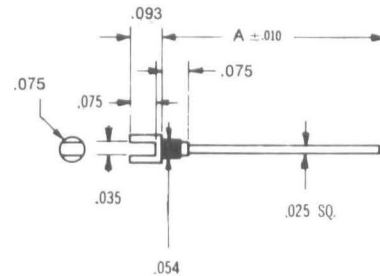
Recommended Mounting Hole — .052 Dia.



Part No.	DIM A
CP-101-1	.645
CP-101-2	.605

GOLD

Recommended Mounting Hole — .052 Dia.

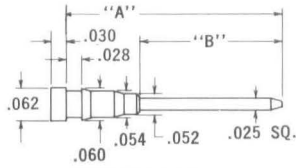


Part No.	DIM A
CP-102-1	.645
CP-102-2	.605

GOLD

Recommended Mounting Hole — .052 Dia.

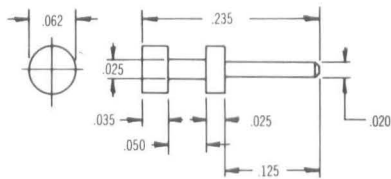
TERMINALS



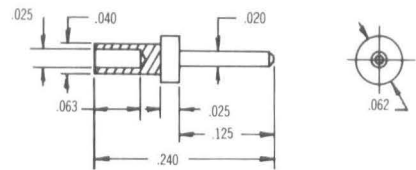
PART	A	B	Material	Plating
CP-118-G	.672	.510	Brass	Gold
CP-118-T	.672	.510	Brass	Tin
CP-119-G	.532	.370	Brass	Gold
CP-119-T	.532	.370	Brass	Tin

Recommended Mounting Hole — .055 Dia.

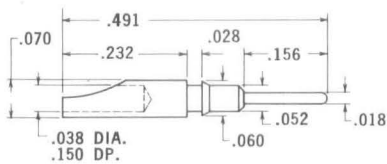
TERMINALS, ROUND



PART	Material	Plating
CP-19	Brass	Gold

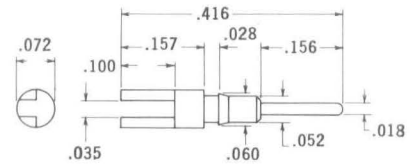


PART	Material	Plating
CP-3	Brass	Gold



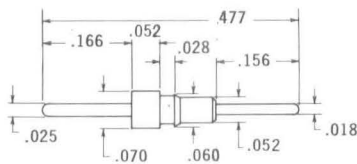
PART	Material	Plating
CP-117-G	Phos. Br.	Gold

Recommended Mounting Hole — .055 Dia.



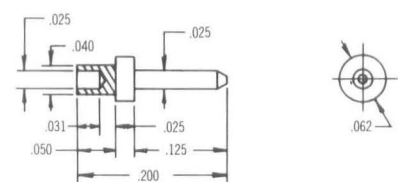
PART	Material	Plating
CP-116-G	Phos. Br.	Gold

Recommended Mounting Hole — .055 Dia.



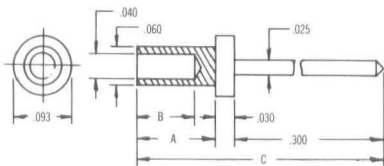
PART	Material	Plating
CP-121-G	Phos. Br.	Gold

Recommended Mounting Hole — .055 Dia.

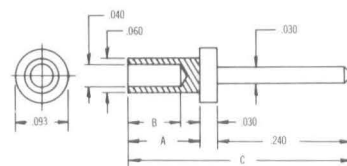


PART	Material	Plating
CP-9	Brass	Gold

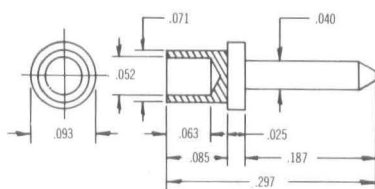
TERMINALS, ROUND



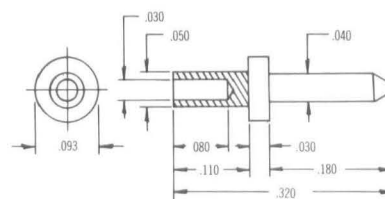
PART	A	B	C	Material	Plating
CP-21-32	.032	.032	.362	Brass	Gold
CP-21-47	.047	.047	.377	Brass	Gold
CP-21-62	.062	.062	.392	Brass	Gold
CP-21-62A	.062	—	.392	Brass	Gold
CP-21-93	.093	.093	.423	Brass	Gold
CP-21-125	.125	.093	.455	Brass	Gold



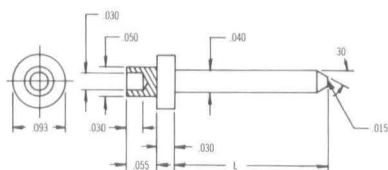
PART	A	B	C	Material	Plating
CP-6-32	.032	.032	.302	Brass	Gold
CP-6-47	.047	.047	.317	Brass	Gold
CP-6-62	.062	.062	.332	Brass	Gold
CP-6-93	.093	.093	.363	Brass	Gold
CP-6-125	.125	.093	.395	Brass	Gold



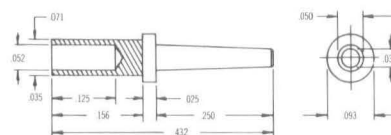
PART	Material	Plating
CP-26	Brass	Gold



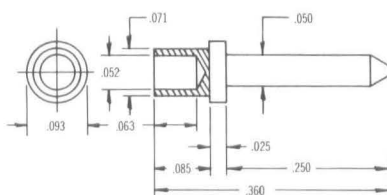
PART	Material	Plating
CP-24-1	Brass	Gold



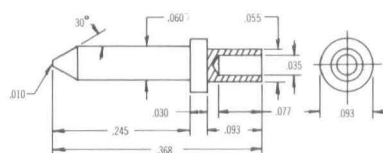
PART	L	Material	Plating
CP-92-1	.470	Brass	Gold
CP-92-2	.220	Brass	Gold
CP-92-3	.350	Brass	Gold



PART	Material	Plating
CP-18	Brass	Gold



PART	Material	Plating
CP-4	Brass	Gold



PART	Material	Plating
CP-95	Brass	Gold

INSTALLATION TOOLS

To order installation tooling for any Robinson Nugent Terminal, specify the Part No. and the method desired to mount in the panel (flared, pressed, riveted, soldered, or staked) and the thickness of panel to be used. All tool sets consist of arbor with .311 dia. shank and base with .375 shank to fit all standard air and arbor assembly presses.

SPECIFICATIONS

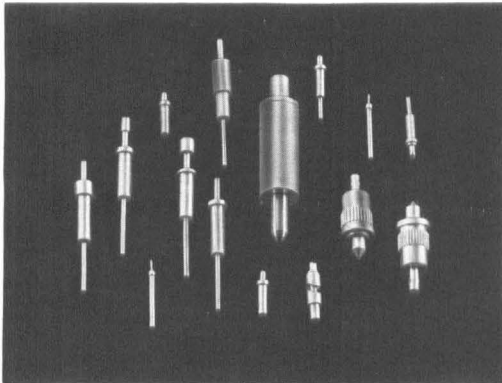
MATERIAL: 1/2 Hard Brass, Composition 22 per Fed. Spec.
QQ-B-626 — Phosphor Bronze per QQ-B-750.

FINISH:

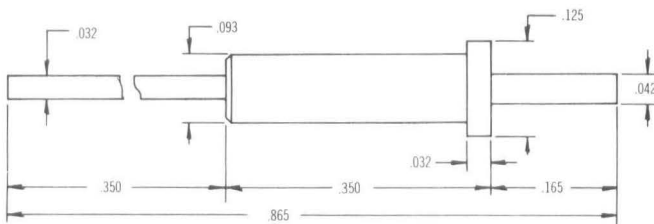
Gold — WIRE WRAP: 10 μ inch over 50 μ inch nickel
ALL OTHER: 30 μ inch over 75 μ inch nickel
Tin — 200 μ inch Min. per MIL-T-10727, Type 1

SPRING LOADED CONTACTS

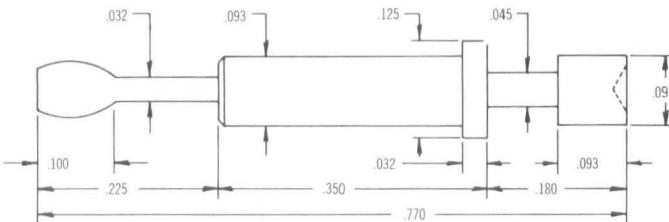
SPRING LOADED CONTACTS



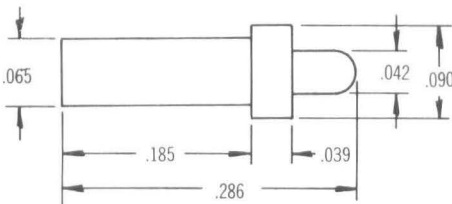
Highly functional when arranged in a matrix pattern for PCB checkout, data card operations, test fixtures for many leadless or radial-lead components as well as lab and prototype use.



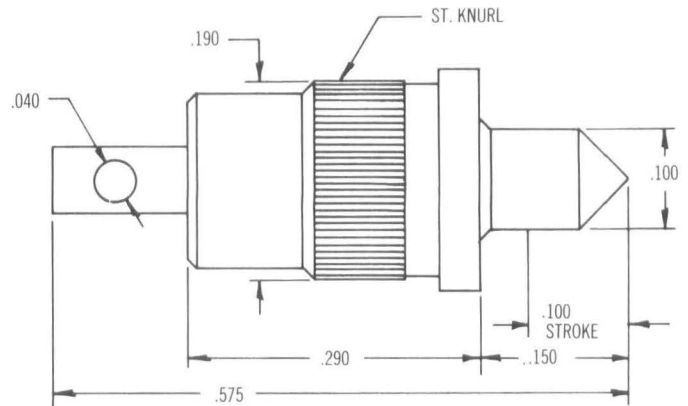
N-124-2
PLUNGER PRESSURE — 6 OZ. AVG.
MAX. TRAVEL — .140"



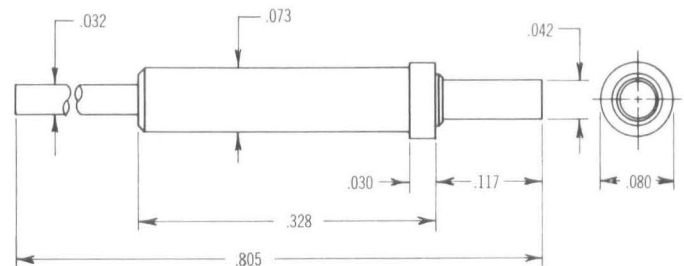
N-128-5
PLUNGER PRESSURE — 6 OZ. AVG.
MAX. TRAVEL — .085"



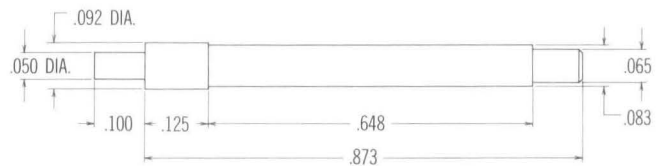
N-120-1
PLUNGER PRESSURE — 4 OZ. AVG.
MAX. TRAVEL — .035"



N-114-3
PLUNGER PRESSURE — 3/4 LBS. AVG.
MAX. TRAVEL — .100"



N-131-2
PLUNGER PRESSURE — 6 OZ. AVG.
MAX. TRAVEL — .100"



N-133-2
PLUNGER PRESSURE — 6 OZ. AVG.
MAX. TRAVEL — .075" (EACH END)

SPECIFICATIONS

MATERIALS: Plunger and Shell — 1/2 Hard Brass per Fed. Spec. QQ-B-626.
Springs — Music Wire Standard.

FINISH: 30 μ inch Gold over 100 μ inch Nickel.

TEST DATA:

Mechanical — For plunger pressure and travel, see spec. listed under each part. Effective life expectancy greatly dependent on plunger travel. In operation, if plunger is depressed to only one-half max travel each cycle, life will be many thousand cycles. If plunger is fully depressed each cycle, life may be greatly decreased.

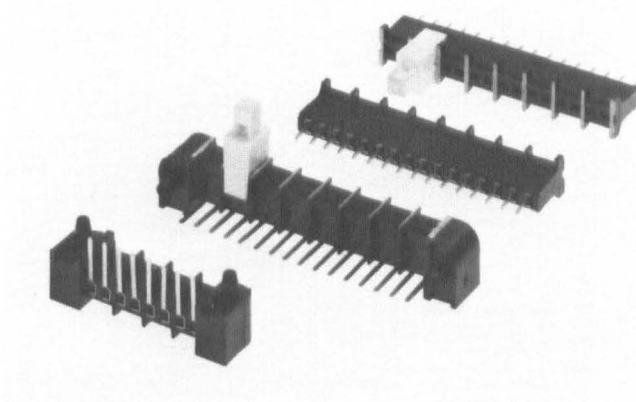
Electrical — (average all parts)

Voltage Breakdown — With 15 Amps across part for 5 min. Avg. drop is 1/2 Volt.

Contact Resistance — Avg. .015 Ohms.

Resistance and plunger pressure unchanged after breakdown test and 50 depressions of plunger.

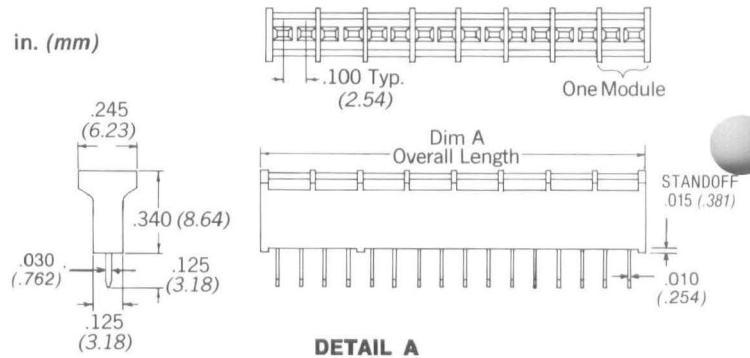
SWS SERIES, PROGRAMMING SHUNT



- Economical device has same function as a S.P.D.T. switch or programming shunt
- Available in three styles and several lengths
- Used to customize PCB features or options
- Right angle version for low profile available

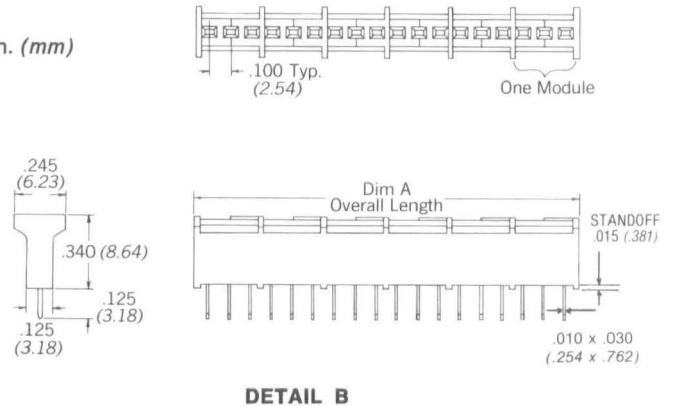
Part No.	DETAIL	No. of Modules	DIM. A
SWS-26-TG	A	6	1.240 (31.50)
SWS-28-TG	A	8	1.640 (41.66)

in. (mm)

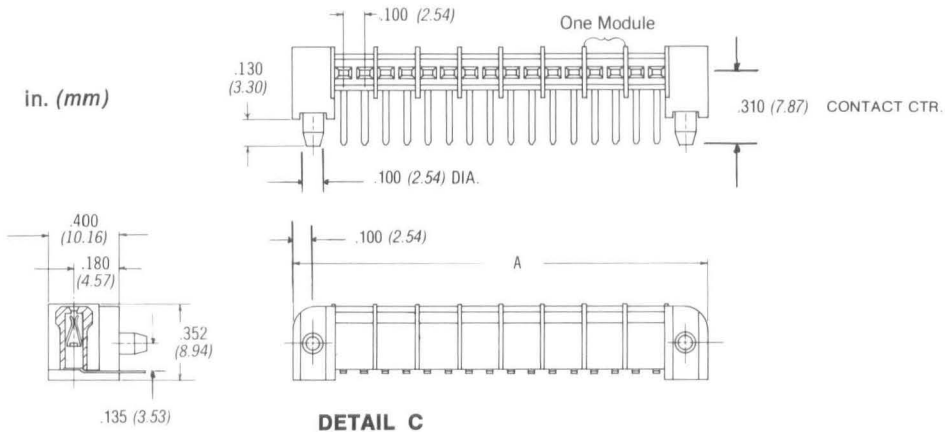


Part No.	DETAIL	No. of Modules	DIM. A
SWS-31-TG	B	1	.340 (8.64)
SWS-32-TG	B	2	.640 (16.26)
SWS-33-TG	B	3	.940 (23.88)
SWS-34-TG	B	4	1.240 (31.50)
SWS-35-TG	B	5	1.540 (39.12)
SWS-36-TG	B	6	1.840 (46.74)

in. (mm)



SPECIAL PRODUCTS



Part No.	DETAIL	No. of Modules	DIM. A
SWS-22-RT-G	C	2	.800 (20.32)
SWS-24-RT-G	C	4	1.200 (30.48)
SWS-26-RT-G	C	6	1.600 (40.64)
SWS-28-RT-G	C	8	2.000 (50.80)

MATERIALS:

BODY: Black glass filled polyester

CONTACT: Phosphor Bronze

CONTACT FINISH: Suffix G 30 μ inch (.672 μ m) min. gold
over 75 μ inch (1.90) min. nickel

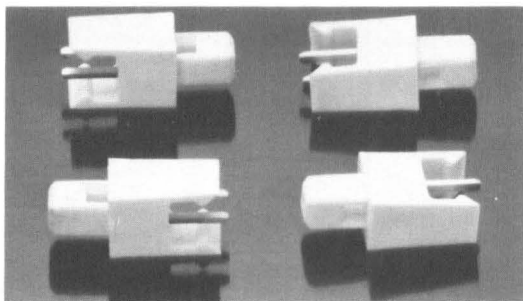
Suffix TG 30 μ inch (.672 μ m) min. gold
in contact area. Tin plate on terminal

RATINGS:

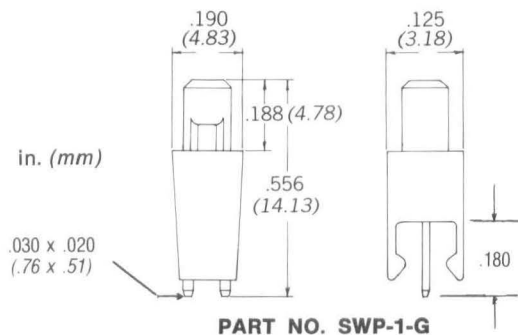
TEMPERATURE RANGE: -65°C to $+125^{\circ}\text{C}$

FLAMMABILITY: UL 94 V-0

SWP-1-G, SHORTING PLUG



- Plugs have positive retention feature for use in high vibration environment.



MATERIALS:

BODY: White nylon

PIN: CA 725

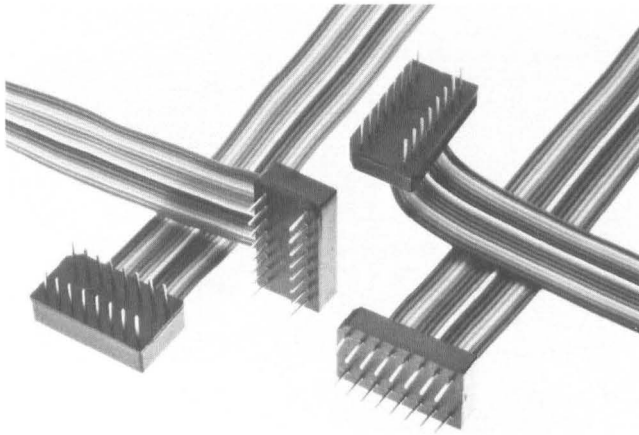
PIN FINISH: 30 μ inch (.672 μ m) min. gold
over 75 μ inch (1.90) min. nickel

RATINGS:

TEMPERATURE RANGE: -65°C to $+125^{\circ}\text{C}$

FLAMMABILITY: UL 94-HB

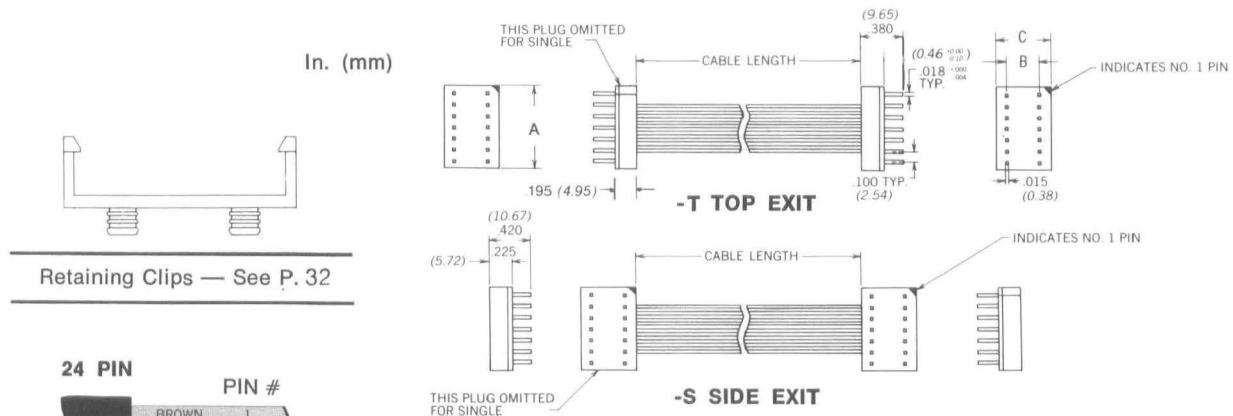
WJC — INTERCONNECT PLUGS



- Tapered ends on pins for easy insertion into sockets
- 14, 16, and 24 pin plugs standard
- Top and side cable exit standard
- Custom options available: special lengths, configuration or conductor

Part No.	No. Pins	Plug	Cable Exit	DIM. A	DIM. B	DIM. C	Retaining Clip	Use With
WJC-143S-X-T	14	single	top	.750 (19.05)	.300 (7.62)	.470 (11.94)	RC-73	ICN-143-S3-X
WJC-143S-X-S	14	single	side	.750 (19.05)	.300 (7.62)	.470 (11.94)	RC-75	ICN-143-S3-X
WJC-143D-X-T	14	double	top	.750 (19.05)	.300 (7.62)	.470 (11.94)	RC-73	ICN-143-S3-X
WJC-143D-X-S	14	double	side	.750 (19.05)	.300 (7.62)	.470 (11.94)	RC-75	ICN-143-S3-X
WJC-163S-X-T	16	single	top	.850 (21.59)	.300 (7.62)	.470 (11.94)	RC-74	ICN-163-S3-X
WJC-163S-X-S	16	single	side	.850 (21.59)	.300 (7.62)	.470 (11.94)	RC-76	ICN-163-S3-X
WJC-163D-X-T	16	double	top	.850 (21.59)	.300 (7.62)	.470 (11.94)	RC-74	ICN-163-S3-X
WJC-163D-X-S	16	double	side	.850 (21.59)	.300 (7.62)	.470 (11.94)	RC-76	ICN-163-S3-X
WJC-246S-X-T	24	single	top	1.250 (31.75)	.600 (15.24)	.795 (20.19)	RC-81	ICN-246-S5-X
WJC-246S-X-S	24	single	side	1.250 (31.75)	.600 (15.24)	.795 (20.19)	RC-81	ICN-246-S5-X
WJC-246D-X-T	24	double	top	1.250 (31.75)	.600 (15.24)	.795 (20.19)	RC-81	ICN-246-S5-X
WJC-246D-X-S	24	double	side	1.250 (31.75)	.600 (15.24)	.795 (20.19)	RC-81	ICN-246-S5-X

X — Cable length in inches. 6", 12", 24", 36" standard. Specify.



Retaining Clips — See P. 32

24 PIN

PIN #	Color
1	BROWN
2	RED
3	ORANGE
4	YELLOW
5	GREEN
6	BLUE
7	VIOLET
8	GRAY
9	WHITE
10	BLACK
11	BROWN
12	RED
13	ORANGE
14	YELLOW
15	GREEN
16	BLUE
17	VIOLET
18	GRAY
19	WHITE
20	BLACK
21	BROWN
22	RED
23	ORANGE
24	YELLOW

WIRE COLOR TO PIN CODING

16 PIN

PIN #	Color
1	BROWN
2	RED
3	ORANGE
4	YELLOW
5	GREEN
6	BLUE
7	VIOLET
8	GRAY
9	WHITE
10	BLACK
11	BROWN
12	RED
13	ORANGE
14	YELLOW
15	GREEN
16	BLUE

14 PIN

PIN #	Color
1	BROWN
2	RED
3	ORANGE
4	YELLOW
5	GREEN
6	BLUE
7	VIOLET
8	GRAY
9	WHITE
10	BLACK
11	BROWN
12	RED
13	ORANGE
14	YELLOW

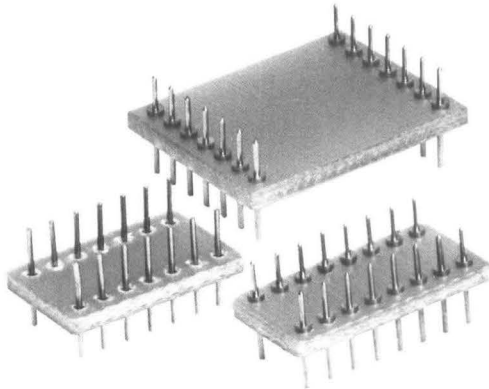
Note: On all double ended plugs pin 1 is connected to pin 1, pin 2 to pin 2, etc.

MATERIALS:

Ribbon Cable — Stranded #26 AWG with PVC insulation to MIL-W-16878D.
 Plug Insulators — Glass Nylon.
 Terminals — Brass, 1/2 hard.
 Finish — 15 μ inch (0.381 μ m) gold, over 75 μ inch (1.905 μ m) nickel

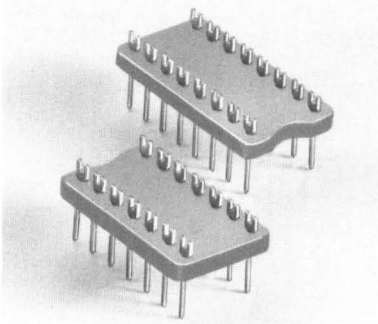
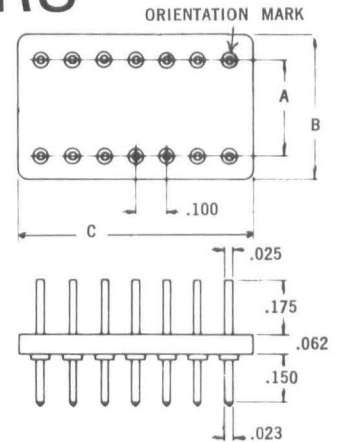
SPECIAL PRODUCTS

DIP ADAPTER PLUGS and COVERS



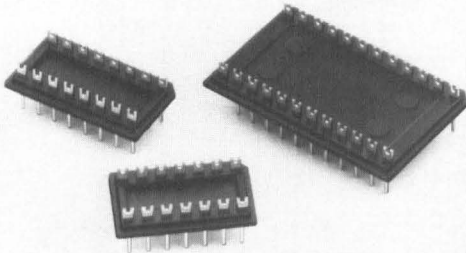
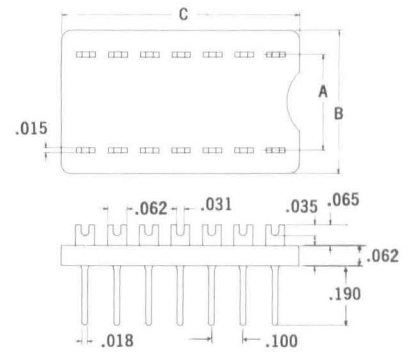
Part No.	Dim. A	Dim. B	Dim. C	No. of Contacts
WPB-143	.300	.450	.750	14
WPB-148	.800	.950	.750	14
WPB-163	.300	.450	.850	16
WPB-168	.800	.950	.850	16
WPB-246	.600	.750	1.250	24
WPB-406	.600	.750	2.050	40

MATERIALS:
 PANEL — G-10 Glass Epoxy Board
 PINS — Brass
 FINISH — 10 μ inch (.254 μ m) gold, over
 50 μ inch (1.27 μ m) nickel



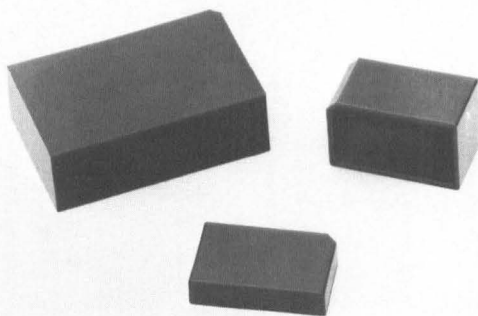
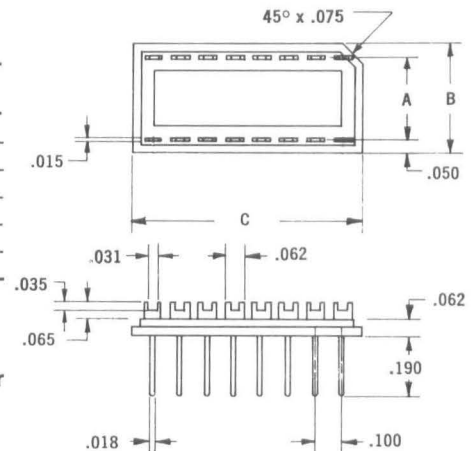
Part No.	A	B	C	No. of Contacts
FPB-143	.300	.400	.750	14
FPB-148	.800	.900	.750	14
FPB-163	.300	.400	.850	16
FPB-168	.800	.900	.850	16
FPB-246	.600	.700	1.250	24
FPB-286	.600	.700	1.450	28
FPB-406	.600	.700	2.050	40

MATERIALS:
 PANEL — G-10 Glass Epoxy Board
 PINS — Brass
 FINISH — 10 μ inch (.254 μ m) gold, over
 50 μ inch (1.27 μ m) nickel



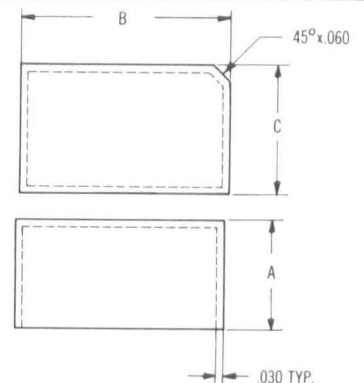
Part No.	Dim. A	Dim. B	Dim. C	No. of Contacts
MPB-143	.300	.470	.750	14
MPB-148	.800	.900	.750	14
MPB-163	.300	.470	.850	16
MPB-168	.800	.900	.850	16
MPB-246	.600	.795	1.245	24
MPB-406	.600	.795	2.050	40

MATERIALS:
 BODY — Glass-filled Nylon, Black
 PINS — Brass
 FINISH — 10 μ inch (.254 μ m) gold, over
 50 μ inch (1.27 μ m) nickel

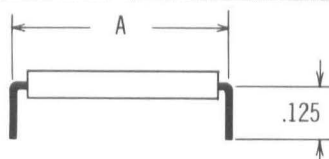
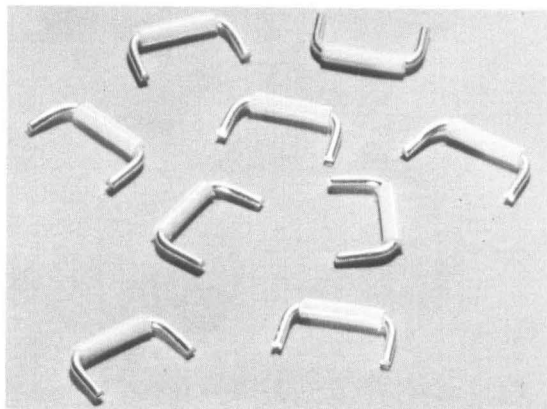


Part No.	A	B	C
MPC-143-1	.160	.750	.470
MPC-143-2	.400	.750	.470
MPC-163-1	.160	.850	.470
MPC-163-2	.400	.850	.470
MPC-246-1	.160	1.245	.795
MPC-246-2	.400	1.245	.795
MPC-406-1	.170	2.050	.795

MATERIAL:
 Glass-filled Nylon, Black



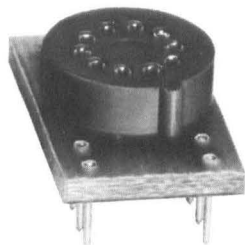
JUMPER LINKS



- Low cost, off-shelf delivery
- White teflon insulated
- Uniform length and bends, clean ends
- Made from solid, tinned, 22 ga. wire (.025 Dia.)
- Materials meet MIL specs.
- Saves time over cutting, bending and manual stripping
- Uniformly packed 1,000 quan./bag. Special lengths, sizes, gages available.

Part No.	Dim. A
J-100-T	.100"
J-250-T	.250"
J-300-T	.300"
J-400-T	.400"
J-600-T	.600"
J-1000-T	1.000"

ADAPTER SOCKET BOARDS



Adapter Socket Boards

TO-pattern or Flatpak sockets mounted on tiny PC boards serve as the intermediate to adapt TO-pattern or Flat-Pak ICs to a DIP pattern.

This allows the retention of the plug-in or quick disconnect concept in test, breadboarding or production applications where high reliability and servicing are factors.

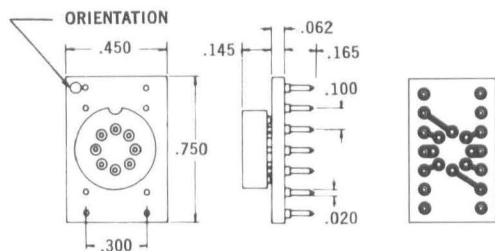
Adapters plug into standard DIP socket board spacing.

Drawings below show socket/pin circuit routing on bottom of PCB.

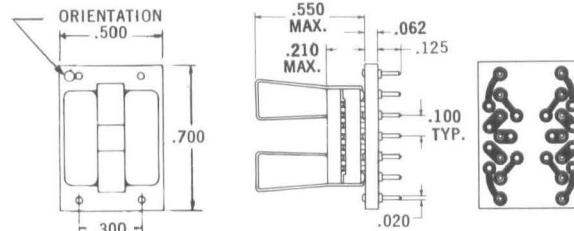
Adapter Part No.	Fig.	Socket No.
0001395	1	SD-5178
0001396	4	SD-51710-23
0001385	2	FP-8814-2
0001526	3	SD-18174

MATERIALS:

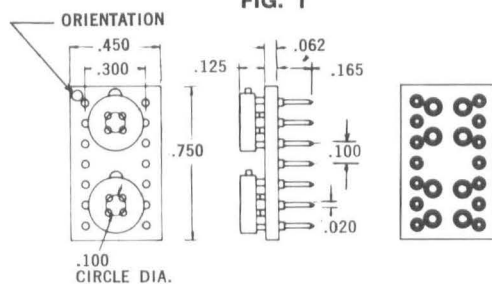
Board — G-10 glass-epoxy laminate $\frac{1}{16}$ " thick
 Terminals — Feed-thru type, $\frac{1}{2}$ hard brass
 Finish — 10 μ inch (.254 μ m) gold, over
 50 μ inch (1.27 μ m) nickel



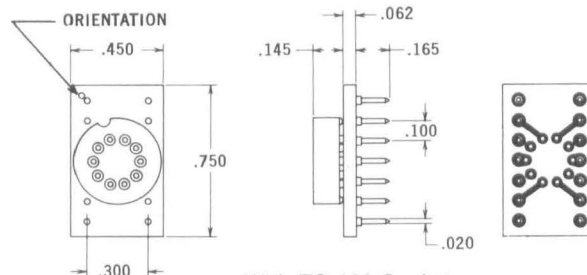
With TO-5 Socket
FIG. 1



With Flat-Pak Socket
FIG. 2



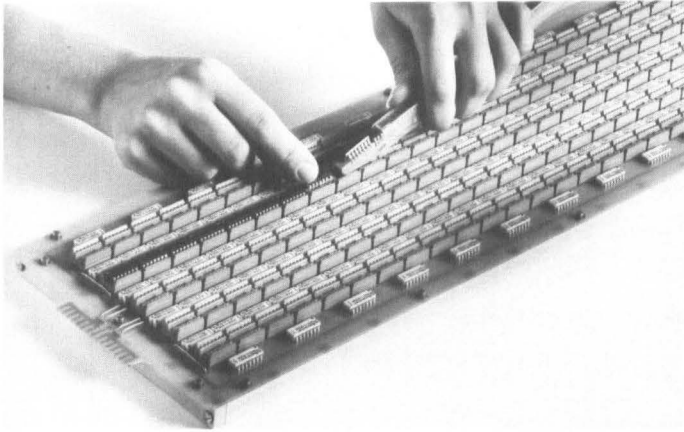
With Double TO-46 Socket
FIG. 3



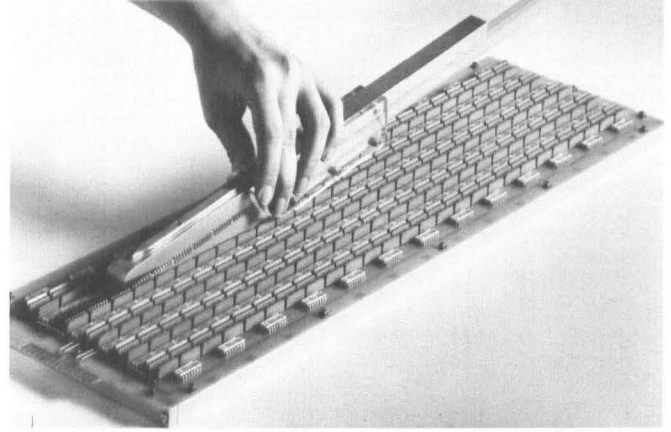
With TO-100 Socket
FIG. 4

SPECIAL PRODUCTS

"DIPper*" IC HANDLING SYSTEM

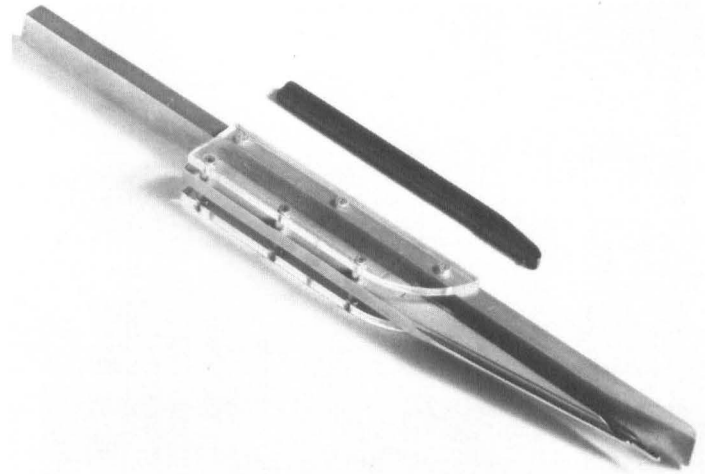


LOADING



UN-LOADING

- **"DIPper" LOAD/UNLOAD TOOLS** are specially constructed for use with RN's "ICN-S2" "TS" or "TSN" series test and burn-in sockets in standard or hi-temp materials. The "DIPper" minimizes handling labor costs and IC lead damage and insures IC orientation.
- **UNLOAD TIME** from test-board back into an average 23-IC stick (plastic magazine) is 1 second flat — with unskilled labor! Users report that a "DIPper" unloads 25-30,000 IC's per shift. Using the "DIPper" system, total cycle time from stick-to-test-board and back-to-stick averages 3-4 seconds per IC.
- **BOTH "DIPper" TOOLS** accommodate most standard IC's with .300", .400" or .600" lead spacing. "DIPper" includes 1 loading tool, 1 un-loading tool and 1 extra replaceable tip for the loading tool. A tip will load approximately 500,000 IC's before replacement.

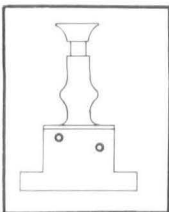


Part No.	For Use With
301-16	ICN-S2 Series (.300 + .400) TS-Series (.400)
311-16	TS-Series (.300) TSN-Series (.300 + .400)
601-24	ICN-S2 Series (.600) TS-Series (.600) TSN-Series (.600)

TOOLS

DILET-6

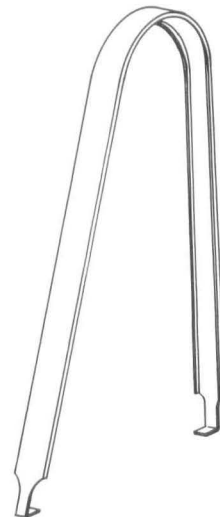
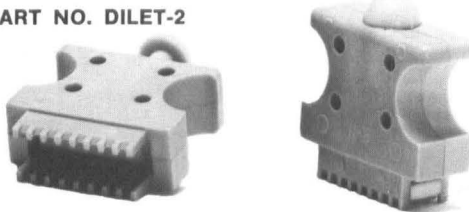
Lloads .600 IC's into sockets. No bent leads or fractured Dip package seals.



DIP INSERTION TOOL

14 and 16-Lead DIPS load easily into bottom of tool. Molded-in contact-ear orientation notches align Tool/Dip precisely with contact pattern on board. Press down on the plunger to seat DIP fully in contacts. Quick, Accurate — no bent leads or fractured DIP package seals. Works well with any socket.

PART NO. DILET-2



DIP EXTRACTOR TOOL

All IC's can be safely and easily removed from any socket. Particularly useful in high-density packaging situations.

PART NO. DILET-3

	Body Material	Contact Material	Contact Plating Thickness	Operating Temp. °C.
PRODUCTION SOCKETS				
ICN Series, Solder Dip	G.F. Polyester	Phos. Bronze	10 μ inch Gold	-65° + 125°
ICN Series, Solder Dip	G.F. Polyester	Phos. Bronze	30 μ inch Tin	-65° + 125°
ICL Series, Solder Dip	G.F. Polyester	BeCu	10 μ inch Gold	-65° + 125°
ICL Series, Solder Dip	G.F. Polyester	BeCu	30 μ inch Tin	-65° + 125°
ICU Series, Solder Dip	G.F. Polyester	Phos. Bronze	10 μ inch Tin	-65° + 125°
ICU Series, Solder Dip	G.F. Polyester	Phos. Bronze	30 μ inch Gold	-65° + 125°
ICA Series, Solder Dip	G.F. Polyester	BeCu	30 μ inch Gold	-65° + 150°
ICT Series, Solder Dip	G.F. Polyester	BeCu	30 μ inch Gold	-65° + 150°
SB Series, Strip Socket, Solder Dip	G.F. Polyester	Phos. Bronze	10 μ inch Gold	-65° + 125°
SB Series, Strip Socket, Solder Dip	G.F. Polyester	Phos. Bronze	30 μ inch Tin	-65° + 125°
SB Series, Strip Socket, Solder Dip	G.F. Nylon	Phos. Bronze	10 μ inch Gold	-65° + 125°
SB Series, Strip Socket, Solder Dip	G.F. Nylon	Phos. Bronze	30 μ inch Tin	-65° + 125°
WB Series, Strip Socket, Wire Wrap	G.F. Polyester	CA 725	10 μ inch Gold	-65° + 125°
WB Series, Strip Socket, Wire Wrap	G.F. Polyester	CA 725	200 μ inch Tin	-65° + 125°
ICN Series, Wire Wrap	G.F. Polyester	CA 725	10 μ inch Gold	-65° + 125°
ICN Series, Wire Wrap	G.F. Polyester	CA 725	200 μ inch Tin	-65° + 125°
ICA Series, Wire Wrap	G.F. Polyester	BeCu	30 μ inch Gold	-65° + 150°
ICA Series, Wire Wrap	G.F. Polyester	BeCu	200 μ inch Tin	-65° + 150°
AS Series, Wire Wrap	G.F. Nylon	BeCu	10 μ inch Gold	-65° + 150°
AS Series, Wire Wrap	G.F. Nylon	BeCu	200 μ inch Tin	-65° + 150°
BURN-IN TEST SOCKETS				
ICN/S2 Series, Solder Dip	G.F. Polyphenylene Sulfide	BeCu	10 μ inch Gold	-65° + 150°
ICN/S2 Series, Solder Dip	G.F. Polyphenylene Sulfide	BeNi	30 μ inch Gold	-65° + 220°
TS Series, Dual-In-Line	G.F. Polyphenylene Sulfide	BeCu	10 μ inch Gold	-65° + 150°
TS Series, Dual-In-Line	G.F. Polyphenylene Sulfide	BeNi	30 μ inch Gold	-65° + 220°
TS Series, TO-5	G.F. Polyphenylene Sulfide	BeNi	30 μ inch Gold	-65° + 220°
TS Series, TO-5	G.F. Polyphenylene Sulfide	BeCu	10 μ inch Gold	-65° + 150°
TSN Series, Dual-In-Line	G.F. Polyphenylene Sulfide	BeCu	10 μ inch Gold	-65° + 150°
TSN Series, Dual-In-Line	G.F. Polyphenylene Sulfide	BeNi	30 μ inch Gold	-65° + 220°
TSD Series, High Density	G.F. Polyphenylene Sulfide	BeCu	10 μ inch Gold	-65° + 150°
FP Series, Flat Pack	G.F. Polysulfone	BeCu	30 μ inch Gold	-65° + 160°
FP Series, Requiring Carriers	G.F. Diallyl Phthalate	BeCu	50 μ inch Gold	-65° + 160°
LCS Series, Leadless IC Socket	G.F. Polyphenylene Sulfide	BeCu	10 μ inch Gold	-65° + 150°
LCS Series, Leadless IC Socket	G.F. Polyphenylene Sulfide	BeNi	30 μ inch Gold	-65° + 220°
SB Series, Burn-In Strip Socket	G.F. Polyphenylene Sulfide	BeNi	30 μ inch Gold	-65° + 220°
SB Series, Strip Socket, Solder Dip	G.F. Polyester	BeCu	10 μ inch Gold	-65° + 150°
TO-PATTERN SOCKETS				
SD Series, PC Mount Sockets	Diallyl Phthalate	BeCu	30 μ inch Gold	-65° + 150°
SD/N Series, Low Cost Sockets	G.F. Nylon	BeCu	30 μ inch Gold	-65° + 150°
DP Series, Chassis Mount Sockets	G.F. Phenolic	BeCu	30 μ inch Gold	-65° + 150°
LP, TP Series, Radial Lead Sockets	G.F. Phenolic	BeCu	30 μ inch Gold	-65° + 150°
MP Series, Square TO-8 Sockets	G.F. Nylon	BeCu	30 μ inch Gold	-65° + 150°
TO-3, TO-66 Power Transistor Sockets	G. F. Phenolic	BeCu	30 μ inch Gold	-65° + 150°
TO-3, TO-66 Power Transistor Sockets	G. F. Phenolic	Copper Alloy 260	200 μ inch Tin	-65° + 125°
TO-3, TO-66 Power Transistor Sockets	Diallyl Phthalate	BeCu	30 μ inch Gold	-65° + 150°
HP Series Power Transistor Sockets	G.F. Phenolic	BeCu	200 μ inch Tin	-65° + 150°
INSULATION DISPLACEMENT CONNECTORS				
IDS Series, IDC Socket	G.F. Polyester	BeCu	30 μ inch Gold	-65° + 125°
QUICK/CONNECT				
QC Series, Pin Sockets	(in FR-4 Epoxy Board)	BeCu	30 μ inch Gold	-65° + 105°
QC Series, Tines	(in FR-4 Epoxy Board)	BeCu	10 μ inch Gold	-65° + 105°
QC Series, Terminals	(in FR-4 Epoxy Board)	BeCu	10 μ inch Gold	-65° + 105°
SPECIAL PRODUCTS				
WJC Series, Cable Plugs	G.F. Nylon	Brass	15 μ inch Gold	-65° + 150°
SWS Series, Programming Shunt	G.F. Nylon	Phos. Bronze	30 μ inch Gold	-65° + 150°

Insertion/Withdrawal ratings given are average readings taken on 3 insertion/withdrawal cycles after initial opening of contact.

Contact Resistance measured using 200 milliamp test current per MIL-STD-202D, Method 307.

Contact Capacitance measured on Universal Bridge.

Insulation Resistance measured at 500 V DC pin to pin per MIL-STD-202D, Method 302.

TEST DATA

Insertion Force	Withdrawal Force	Contact Rating	Contact Resistance	Contact Capacitance	Insulation Resistance	Note
8.3 oz.	2.3 oz.	1 Amp	6.6 Milliohm	1 Pf	5000 Megohm Min.	1
8.9 oz.	2.1 oz.	1 Amp	8.0 Milliohm	1 Pf	5000 Megohm Min.	1
6.5 oz.	4.5 oz.	1 Amp	8.5 Milliohm	1 Pf	5000 Megohm Min.	1
6.5 oz.	4.5 oz.	1 Amp	10.0 Milliohm	1 Pf	5000 Megohm Min.	1
6.5 oz.	3.4 oz.	1 Amp	11.5 Milliohm	1 Pf	5000 Megohm Min.	1
7.8 oz.	3.2 oz.	1 Amp	7.5 Milliohm	1 Pf	5000 Megohm Min.	1
10.9 oz.	4.8 oz.	1 Amp	6.3 Milliohm	1 Pf	5000 Megohm Min.	2
8.5 oz.	6.0 oz.	1 Amp	6.3 Milliohm	1 Pf	5000 Megohm Min.	1
8.3 oz.	2.3 oz.	1 Amp	6.6 Milliohm	1 Pf	5000 Megohm Min.	1
8.9 oz.	2.1 oz.	1 Amp	8.0 Milliohm	1 Pf	5000 Megohm Min.	1
6.5 oz.	1.0 oz.	1 Amp	6.3 Milliohm	1 Pf	5000 Megohm Min.	1
6.8 oz.	1.0 oz.	1 Amp	7.0 Milliohm	1 Pf	5000 Megohm Min.	1
9.5 oz.	2.7 oz.	1 Amp	6.3 Milliohm	1 Pf	5000 Megohm Min.	1
8.7 oz.	1.9 oz.	1 Amp	8.0 Milliohm	1 Pf	5000 Megohm Min.	1
9.5 oz.	2.7 oz.	1 Amp	7.0 Milliohm	1 Pf	5000 Megohm Min.	1
10.3 oz.	2.3 oz.	1 Amp	8.0 Milliohm	1 Pf	5000 Megohm Min.	1
10.9 oz.	4.8 oz.	1 Amp	6.3 Milliohm	1 Pf	5000 Megohm Min.	2
13.0 oz.	7.1 oz.	1 Amp	8.0 Milliohm	1 Pf	5000 Megohm Min.	2
3.9 oz.	2.1 oz.	1 Amp	4.0 Milliohm	1 Pf	5000 Megohm Min.	1
3.9 oz.	2.1 oz.	1 Amp	4.7 Milliohm	1 Pf	5000 Megohm Min.	1
6.5 oz.	1.0 oz.	1 Amp	N/A	1 Pf	5000 Megohm Min.	1
6.0 oz.	1.0 oz.	1 Amp	N/A	1 Pf	5000 Megohm Min.	1
1.0 oz.	0.2 oz.	1 Amp	6.5 Milliohm	1 Pf	5000 Megohm Min.	1
1.0 oz.	0.2 oz.	1 Amp	10.0 Milliohm	1 Pf	5000 Megohm Min.	1
1.6 oz.	0.9 oz.	1 Amp	N/A	1 Pf	5000 Megohm Min.	2
1.6 oz.	0.9 oz.	1 Amp	N/A	1 Pf	5000 Megohm Min.	2
2.7 oz.	0.4 oz.	1 Amp	6.0 Milliohm	1 Pf	5000 Megohm Min.	1
4.0 oz.	0.8 oz.	1 Amp	8.0 Milliohm	1 Pf	5000 Megohm Min.	1
3.4 oz.	1.5 oz.	1 Amp	7.0 Milliohm	1 Pf	5000 Megohm Min.	1
N/A	N/A	1 Amp	N/A	1 Pf	5000 Megohm Min.	N/A
N/A	N/A	1 Amp	N/A	1 Pf	5000 Megohm Min.	N/A
N/A	N/A	1 Amp	N/A	1 Pf	5000 Megohm Min.	N/A
N/A	N/A	1 Amp	N/A	1 Pf	5000 Megohm Min.	N/A
11.3 oz.	3.0 oz.	1 Amp	N/A	1 Pf	5000 Megohm Min.	1
6.5 oz.	1.0 oz.	1 Amp	6.3 Milliohm	1 Pf	5000 Megohm Min.	1
6.3 oz.	2.4 oz.	1 Amp	5.0 Milliohm	1 Pf	5000 Megohm Min.	2
6.3 oz.	2.4 oz.	1 Amp	5.0 Milliohm	1 Pf	5000 Megohm Min.	2
15.2 oz.	8.7 oz.	1 Amp	5.0 Milliohm	1 Pf	5000 Megohm Min.	2
16.2 oz.	10.7 oz.	1 Amp	5.0 Milliohm	1 Pf	5000 Megohm Min.	2
6.8 oz.	3.0 oz.	1 Amp	5.0 Milliohm	1 Pf	5000 Megohm Min.	2
11.5 oz.	3.7 oz.	10 Amps	6.2 Milliohm	1 Pf	5000 Megohm Min.	3, 4
10.5 oz.	3.7 oz.	10 Amps	7.2 Milliohm	1 Pf	5000 Megohm Min.	3, 4
10.5 oz.	3.7 oz.	10 Amps	6.2 Milliohm	1 Pf	5000 Megohm Min.	3, 4
10.5 oz.	3.7 oz.	30 Amps	4.0 Milliohm	1 Pf	5000 Megohm Min.	3
6.4 oz.	4.0 oz.	1 Amp	9.3 Milliohm	1 Pf	5000 Megohm Min.	5
10.9 oz.	4.8 oz.	1 Amp	4.3 Milliohm	1 Pf	5000 Megohm Min.	2
N/A	N/A	1 Amp	0.5 Milliohm	1 Pf	5000 Megohm Min.	N/A
N/A	N/A	1 Amp	0.5 Milliohm	1 Pf	5000 Megohm Min.	N/A
N/A	N/A	1 Amp	N/A	1 Pf	5000 Megohm Min.	N/A
N/A	N/A	1 Amp	11.0 Milliohm	1 Pf	5000 Megohm Min.	N/A

NOTES:

1. Insertion/Withdrawal readings taken with .010 flat pin.
2. Insertion/Withdrawal readings taken with .018 dia. pin.
3. Insertion/Withdrawal readings for TO-3 sockets taken with .042 dia. pin.
4. Insertion/Withdrawal readings for TO-66 sockets taken with .030 dia. pin.
5. Insertion/Withdrawal readings taken with .025 square pin.

GOLD VERSUS TIN

RN Test Report — Thermal Cycling (1000 hours).

Plating Spec. (1 and 2) Mated IC with Socket.

All tests performed in accordance with MIL Std. 202D, Method 307 — 200 Milliamps Current — ICs and Sockets remained mated thru 1000 hours at 100°C.

			0 hrs.	200 hrs.	500 hrs.	1000 hrs.
Group "A"	Tin Socket and Gold IC	Contact Resistance	9 Milliohms	10 Milliohms	12.8 Milliohms	12.0 Milliohms
Group "B"	Tin Socket and Tin IC	Contact Resistance	10.0 Milliohms	12.5 Milliohms	15.2 Milliohms	16.5 Milliohms
Group "C"	Gold Socket and Tin IC	Contact Resistance	9.5 Milliohms	13.0 Milliohms	13.6 Milliohms	12.0 Milliohms
Group "D"	Gold Socket and Gold IC	Contact Resistance	8.0 Milliohms	9.1 Milliohms	9.1 Milliohms	8.9 Milliohms

TEST DATA/PRELIMINARY RELIABILITY REPORT ON RN IDC PRODUCTS

This data describes results of reliability tests performed at Robinson Nugent. The purpose of this evaluation was to determine the physical, electrical, and environmental characteristics of both the socket end and the insulation displacement end of the Insulation Displacement Connectors. Each connector and header was mated and unmated 3 times before any tests were performed. All tests performed on heavy gold products.

Test	Method	Result
Mechanical:		
1.1 Cable Retention	Unmated connector without strain relief assembled to cable subjected to axial force of 25 lbs. per inch of cable applied six inches from connector to put maximum stress on contact-cable interface.	No damage to connector.
1.2 Mating/Unmating Force	Sample of connectors and headers mated and unmated four times; forces recorded.	Avg. mating force 4.55 oz. per contact. Avg. unmating force 2.65 oz. per contact.
1.3 Intentional Abuse	Connector mated and unmated with .025" square pin which was twisted and rotated to maximize intentional abuse.	Avg. mating force 2.50 oz. per contact. Avg. unmating force 2.00 oz. per contact.
1.4 Socket Durability	Connectors and headers were mated and unmated 500 times; required forces recorded to mate and unmate after these preparations.	Avg. mating force 2.77 oz. per contact. Avg. unmating force 2.46 oz. per contact.
Environmental:		
2.1 Ammonium Polysulfide	Mated connectors and headers subjected to 4 hours exposure to 22% solution in enclosed chamber.	No exposed base metal.

Test	Method	Result
2.2 Nitric Acid	Mated connectors and headers exposed to concentrated nitric acid fumes for one hour and then for 15 minutes to ammonium sulfide fumes.	Avg. contact resistance between connector and header was 8.40 milliohms.
2.3 Salt Vapor	Mated connectors and headers subjected to a salt vapor bath for 8 hours at 190° F.	Avg. contact resistance between connector and header was 11.10 milliohms.
Electrical:		
3.1 Insulation Resistance	At 500 volts AC, adjacent leads tested.	Min. 6500 megohms.
3.2 Dielectric Withstanding Voltage	Test voltage of 500 volts AC applied between adjacent leads for 5 seconds.	No evidence of arcing, breakdown, or any damage.
3.3 Initial Contact Resistance between Header and Cable	A wired Insulation Displacement Connector was mated with a header; contact resistance measured with millivoltmeter.	Avg. 11.75 milliohms.
3.4 Contact Resistance between Header and Cable	Connector mated to header; after 1.1 contact resistance measured with millivoltmeter. Connector mated to header; after 1.4 contact resistance measured with millivoltmeter.	Avg. 11.45 milliohms. Avg. 11.80 milliohms.
3.5 Contact Resistance between Connector and Header	Connector mated to header; after 2.1 contact resistance measured with millivoltmeter. See 2.2 and 2.3 results for other electrical test results.	Avg. 9.3 milliohms.

RN IDC products are UL recognized: file number E-73746.

ROBINSON NUGENT SIDE BEARING CONTACT (SEE PAGE 2)

The side bearing contact was developed with the following concepts in mind:

- To improve the overall ability — electrical & mechanical — of a contact in any dimensional range.
- To ensure constant contact resistance after many insertions and withdrawals.
- Minimize damage to plating of IC lead frames and contacts.
- Increase the area of electrical contact by wiping the flat side of the IC lead frame.
- To ensure a long field service life by designing the socket cavity to support and maintain retention in worst "cases" and prevent overstress of the contact.
- Conclusion: Side bearing contacts perform better over a longer time since they:
 - Maintain consistent device retention
 - Cause no plating degradation
 - Operate over greater dimensional ranges
 - Contacts are protected against "over spring" on the side portion of IC lead frames.

TEST DATA/PRELIMINARY RELIABILITY REPORT ON QUICK/CONNECT

This data describes the results of reliability tests conducted by Robinson Nugent. The purpose of this evaluation was to determine the physical, electrical, and environmental characteristics of both socket end and the tine end of the Quick/Connect Socket.

Test	Method	Result
Mechanical:		
Wire Bend	A 30 ga. solid copper wire (Milene insul.) inserted into insulation displacement tine, wire then bent 90° then back to original position 10 times. Wire was monitored for continuity with ohmmeter throughout test.	No discontinuity.
Insertion/ Withdrawal Force	Measurements made for .018 diameter test pin.	Avg. insertion force 10.9 oz. Avg. withdrawal force 4.8 oz.
Electrical:		
Initial Contact Resistance	Each Quick/Connect socket mated to a dual-in-line IC lead; measured with milliohmeter at open circuit potential of 20 millivolts, closed circuit test current of 10 milliamperes.	Avg. 10.00 milliohms.

*We feel reduction in contact resistance due to surface polishing in contact area.

Test	Method	Result
Socket Durability	Inserting and withdrawing dual-in-line IC leads into Quick/Connect sockets 100 times.	Avg. contact resistance (milliohms) after 25 cycles 11.42 after 50 cycles 12.15 after 75 cycles 12.93 after 100 cycles 16.14
Tine Durability	30 ga. solid copper wire (Kynar insulation) inserted and withdrawn 50 times from Quick/Connect tine.	Avg. contact resistance (milliohms) initial 1.18 after 50 cycles, 1.04*
Environmental:		
Ammonium Polysulfide	Quick/Connect tines subjected to 4 hours exposure in atmosphere of 22% solution of ammonium polysulfide in enclosed chamber.	No exposed base metal. Avg. contact resistance (milliohms) initial 1.05 after 4 hrs. 1.50
Nitric Acid	Quick/Connect tines exposed to concentrated nitric acid fumes for 1 hour, then for 15 minutes to ammonium sulfide.	Avg. contact resistance (milliohms) initial 1.05 after test 4.2

METAL MATERIALS SPECIFICATIONS

1. Brass (Rd.) half hard, alloy 260, ASTM-B16 Fed. Spec. QQ-B-626C.
2. Brass (Flat) half hard, alloy 260, ASTM-B36, alloy 6, Fed. Spec. QQ-B-613C.
3. Beryllium Copper (Rd.) half hard, alloy 172, ASTM-B-196, Fed. Spec. QQ-C-533 heat treated.
4. Beryllium Copper (Flat) quarter hard, alloy 172, ASTM-B-194, Fed. Spec. QQ-C-533 heat treated.
5. Phosphor Bronze (Rd.) half hard, CA alloy 544, Fed. Spec. QQ-B-750 comp. B.
6. Phosphor Bronze (Flat) grade A 90,000-102,000 tensile.
7. Beryllium Nickel — 440 sheet, quarter hard, heat treated.

PLATING SPECIFICATIONS

1. Gold plate 10 μ inch min. MIL-G-45204 over nickel under plate 50 μ inch min.
2. Gold plate 30 μ inch min. MIL-G-45204 over nickel under plate 75 μ min.
3. Bright acid tin 200 μ inch min. MIL-T-10727, type 1.
4. Hot tin dip 30 μ inch min.

TOLERANCES UNLESS OTHERWISE SPECIFIED

- Decimals $\pm .005$ ($\pm .127$)
 Fractions $\pm \frac{1}{64}$ ($\pm .406$)
 Angles $\pm 3^\circ$

PLASTIC MATERIALS SPECIFICATIONS

1. Diallyl-Phthalate — glass filled per MIL-M-14, type SDG, light green.
2. Glass filled nylon, type 66, short glass fiber-filled, black.
3. Glass filled phenolic MIL-M-14F, type MFH, dark green.
4. Polyester 20% glass filled, black/natural.
5. PPS 20% glass filled, brown.
6. Silicone — glass filled, gray.
7. Polysulfone — glass filled, green.

MISCELLANEOUS MATERIALS SPECIFICATIONS

1. FR4 — glass epoxy board per MIL-D-13949D, type FL-GF NEMA grade FR-4, 2 oz., copper clad both sides.
2. Nomex — FR, 150°C rated, wafer strip.

DIMENSIONS

Controlling dimensions are shown in inches.
 Metric equivalents are shown in parenthesis.

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0001385	70	FPB-143 thru FPB-406	69
0001395 and 0001396	70		
0001526	70	HP-3452-T thru HP-3455-T	24
0001535	16		
0001782	25	ICA-083-S-X thru ICA-426-S-X	6
0001890	16	ICA-083-WA-X thru ICA-426-WA-X	10
0002011	25	ICA-083-WB-X thru ICA-426-WB-X	10
0002240	25		
0001587	25	ICD-406-S7-X	15
		ICD-486-S7-X	15
0503940	17	ICD-646-S7-X	15
0504196	17		
0504197	17	ICL-083-S6-X thru ICL-406-S7-X	5
0504784	11		
		ICN-063-S3-X thru ICN-649-S5-X	3
18-32 thru 18-43	21	ICN-083-S2 thru ICN-406-S2	12
301-16 and 311-16	71	ICN-083-WB-X thru ICN-406-WB-X	9
AS-143-U3-X thru AS-406-U3-X	11	ICT-083-S-X thru ICT-426-S-X	7
CAB-10 thru CAB-50	40	ICU-083-S6-X thru ICU-406-S7-X	5
CAB-10-CC thru CAB-50-CC	40		
CAB-14-GP thru CAB-50-GP	41	IDD-9-S-G thru IDD-37-S-G	35
CAB-14-GPD thru CAB-50-GPD	41	IDD-9-P-G thru IDD-37-9-G	36
CAB-10-S-J thru CAB-50-S-J	41		
		IDE-10 thru IDE-50	34
CP-3	63	IDE-10-E thru IDE-50-E	34
CP-4	64	IDE-10-H thru IDE-50-H	34
CP-6-32 thru CP-6-125	64		
CP-9	63	IDH-10PK-S3 thru IDH-60PK-S3	28
CP-18	64	IDH-10PK-S4 thru IDH-60PK-S4	28
CP-19	63	IDH-10PK-SR3 thru IDH-60PK-SR3	28
CP-21-32 thru CP-21-125	64	IDH-10PK-SR4 thru IDH-60PK-SR4	28
CP-24-1	64	IDH-10PK-W thru IDH-60PK-W	28
CP-26	64	IDH-10PK-WR thru IDH-60PK-WR	28
CP-92-1 thru CP-92-3	64	IDH-10K-S3 thru IDH-60K-S3	29
CP-95	64	IDH-10K-S4 thru IDH-60K-S4	29
CP-101-1 thru CP-102-2	62	IDH-10K-SR3 thru IDH-60K-SR3	29
CP-105-1 thru CP-105-6	62	IDH-10K-SR4 thru IDH-60K-SR4	29
CP-116-G thru CP-119-T	63	IDH-10K-W thru IDH-60K-W	29
CP-121-G	63	IDH-10K-WR thru IDH-10K-WR	29
CP-122-1 and CP-122-2	62	IDH-10-S-I thru IDH-50-W	39
		IDH-10-S-I thru IDH-50-WR	39
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CT-3	40	IDH-10-S-I-E thru IDH-50-WR-E	39
CT-4, CT-4A	44	IDH-10LP-S-I thru IDH-50LP-W	30
CTB-A-E	44	IDH-10LP-SR-I thru IDH-50LP-WR	30
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DHW-2, DHW-21, DHW-22 and DHW-23	37	IDS-10PK-SR thru IDS-60PK-SR	27
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IDS-10NP thru IDS-50NP	38	QC-Socketboards	47-54
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IDS-10-SR thru IDS-50-SR	38	QCT-2	56
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		QCW-30	56
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LP-5178 thru LP-51710-23	22	SB-25-100-X	8
LP-18173 and LP-18174	22	SB-225B-G	15
		SB-25B-100-G	15
MD-3452-G thru MD-66302-1G	24	SBF-5-100-X thru SBF-25-100-X	8
MP-3452-G thru MP-66302-2T	24	SBF-25B-100-G	15
MP-5173 and MP-5174	21		
MP-12075-X thru MP-16100-X	23	SD-5173 thru SD-5178	20
MPB-143 thru MPB-406	60	SD-5173-N thru SD-5178-N	20
CPC-143-1 thru MPC-406-1	60	SD-5178-10-23	20
		SD-18173 and SD-18174	20
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		TS-31014 thru TS-61040	14
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GENERAL STATEMENT OF POLICY

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The application information is presented for reference only and Robinson-Nugent accepts no responsibility for its use.

The Product Warranty is thirty days and expressly limited to replacement of products with defective workmanship.

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