



## SECTION 6 CONTENTS

<b>AUDIO JACKS</b> .....	117	Jacks, PC Mount .....	113
<b>BANANA PLUGS &amp; JACKS</b>		Jacks, PTFE Insulated" .....	113
Mini, Standard, Large .....	118-119	Pins, Test (Tip Plugs) .....	112
<b>BINDING POSTS</b> .....	117	Test Jacks .....	113
<b>MICRO PINS &amp; JACKS</b>		<b>TRANSISTOR HARDWARE &amp; SOCKETS</b>	
Micro Jacks .....	108-109	Sockets .....	123
Micro Pins .....	110-111	Mounting Kits .....	122
Shorting Pins & Jacks .....	111	Mica Insulators .....	122
<b>NETWORK / ETHERNET JACKS</b> .....	120-121	<b>USB JACKS &amp; PLUGS</b>	
IP68 .....	120	USB 2.0 .....	114-115
<b>PHONO PLUGS &amp; JACKS</b> .....	120, 124	USB 3.0 .....	116
<b>AUDIO JACKS</b>		USB 3.1 (Type C) .....	116
Jacks, Panel Mount (TIP) .....	112		



- Space saving design for high density packaging
- Beryllium Copper multi-spring contact maintains retention after multiple insertions
- Ideal for mounting transistors, resistors, diodes, IC's and similar miniature components
- Custom micro jacks manufactured to your specifications
- Other platings available upon request

## SPECIFICATIONS

**Body:** Brass, ASTM-B16  
**Spring:** Beryllium Copper (QQ-C-533)

## Plating:

**Gold:** .000005 per MIL-G-45204

**RoHS** (RoHS Compliant)

**Tin/Lead:** .000200 to .000300

per MIL-T-10727, Type 1

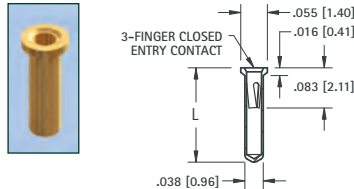
**RoHS** (Non-RoHS Compliant)

## PLATING OPTIONS

PLATING	BODY	CONTACT SPRING	RoHS
Gold/Gold	Gold	Gold	Compliant
Tin/Tin	Tin/Lead	Tin/Lead	Non-Compliant
Tin/Gold	Tin/Lead	Gold	

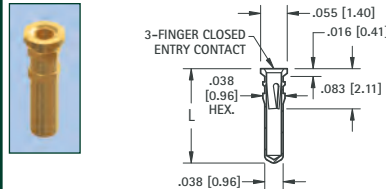


### .015 (.38) - .021 (.53) PIN - SOLDER MOUNT



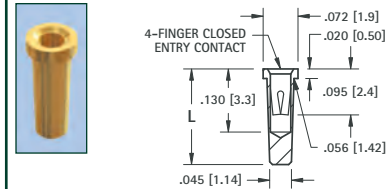
RoHS	NON-RoHS		L	Mtg. Hole Dia.
GOLD/GOLD	TIN/TIN	TIN/GOLD		
CAT. NO.	CAT. NO.	CAT. NO.	Length	
1411-1	1431-1	1420-1	.140 (3.6)	.042
1411-2	1431-2	1420-2	.170 (4.3)	(1.07)

### .015 (.38) - .021 (.53) PIN - PRESS FIT



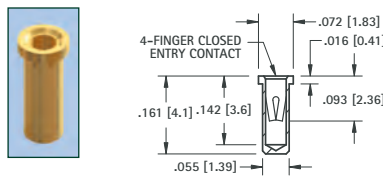
RoHS	NON-RoHS		L	Mtg. Hole Dia.
GOLD/GOLD	TIN/TIN	TIN/GOLD		
CAT. NO.	CAT. NO.	CAT. NO.	Length	
1412-1	1432-1	1468-1	.140 (3.6)	.040
1412-2	1432-2	1468-2	.170 (4.3)	(1.02)
1412-3	1432-3	1468-3	.282 (7.2)	

### .015 (.38) - .025 (.64) PIN - TAPER-FIT



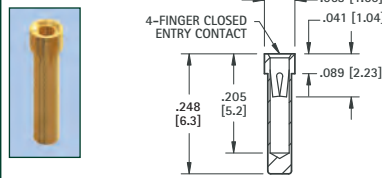
RoHS	NON-RoHS		L	Mtg. Hole Dia.
GOLD/GOLD	TIN/TIN	TIN/GOLD		
CAT. NO.	CAT. NO.	CAT. NO.	Length	
1415-1	1435-1	1469-1	.160 (4.1)	.055
1415-2	1435-2	1469-2	.190 (4.8)	(1.40)

### .015 (.38) - .025 (.64) PIN - SOLDER MOUNT



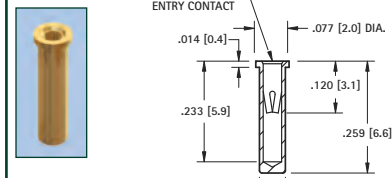
RoHS	NON-RoHS		L	Mtg. Hole Dia.
GOLD/GOLD	TIN/TIN	TIN/GOLD		
CAT. NO.	CAT. NO.	CAT. NO.	Length	
1413	1433	1470	.059 (1.50)	

### .015 (.38) - .025 (.64) PIN - SOLDER MOUNT



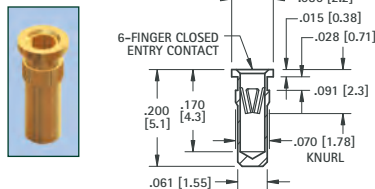
RoHS	NON-RoHS		L	Mtg. Hole Dia.
GOLD/GOLD	TIN/TIN	TIN/GOLD		
CAT. NO.	CAT. NO.	CAT. NO.	Length	
1603	1606	1607	.052 (1.32)	

### .022 (.56) - .032 (.81) PIN - SOLDER MOUNT



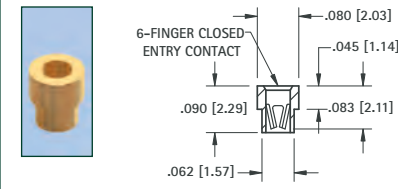
RoHS	NON-RoHS		L	Mtg. Hole Dia.
GOLD/GOLD	TIN/TIN	TIN/GOLD		
CAT. NO.	CAT. NO.	CAT. NO.	Length	
1693	1694	1695	.063 (1.60)	

### .022 (.56) - .034 (.86) PIN - PRESS FIT



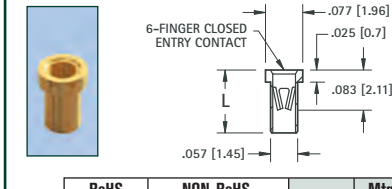
RoHS	NON-RoHS		L	Mtg. Hole Dia.
GOLD/GOLD	TIN/TIN	TIN/GOLD		
CAT. NO.	CAT. NO.	CAT. NO.	Length	
1416	1436	1471	.067 (1.70)	

### .022 (.56) - .034 (.86) PIN - SOLDER MOUNT



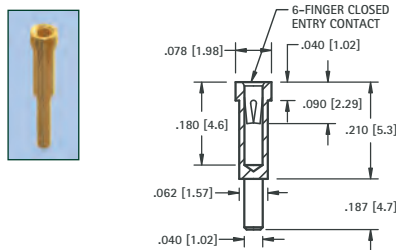
RoHS	NON-RoHS		L	Mtg. Hole Dia.
GOLD/GOLD	TIN/TIN	TIN/GOLD		
CAT. NO.	CAT. NO.	CAT. NO.	Length	
1658	1659	1673	.065 (1.65)	

### .025 (.64) - .037 (.94) PIN - SOLDER MOUNT



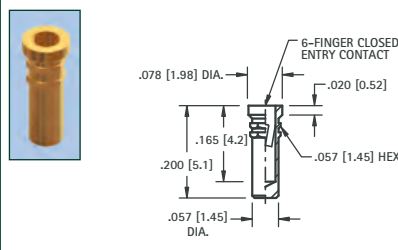
RoHS	NON-RoHS		L	Mtg. Hole Dia.
GOLD/GOLD	TIN/TIN	TIN/GOLD		
CAT. NO.	CAT. NO.	CAT. NO.	Length	
1626-1	1614-1	1619-1	.095 (2.4)	.062
1626-2	1614-2	1619-2	.105 (2.7)	(1.57)
1626-3	1614-3	1619-3	.155 (3.9)	

### .025 (.64) - .037 (.94) PIN - SOLDER MOUNT



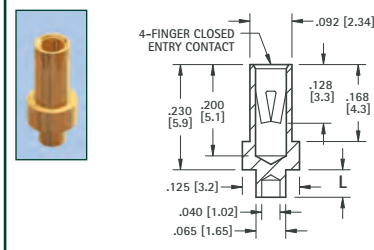
RoHS	NON-RoHS		L	Mtg. Hole Dia.
GOLD/GOLD	TIN/TIN	TIN/GOLD		
CAT. NO.	CAT. NO.	CAT. NO.	Length	
3590	3591	—	.065 (1.65)	

### .025 (.64) - .037 (.94) PIN - PRESS FIT



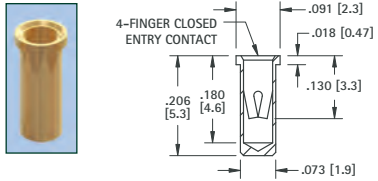
RoHS	NON-RoHS		L	Mtg. Hole Dia.
GOLD/GOLD	TIN/TIN	TIN/GOLD		
CAT. NO.	CAT. NO.	CAT. NO.	Length	
1697	1698	1699	.063 (1.60)	

### .032 (.81) - .046 (1.17) PIN - SWAGE MOUNT



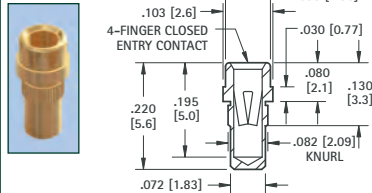
RoHS	NON-RoHS		L	Mtg. Hole Dia.
GOLD/GOLD	TIN/TIN	TIN/GOLD		
CAT. NO.	CAT. NO.	CAT. NO.	Length	
1419-1	1439-1	1478-1	.062 (1.6)	.069
1419-2	1439-2	1478-2	.094 (2.4)	(1.75)

**.032 (.81) - .046 (1.17) PIN - SOLDER MOUNT**



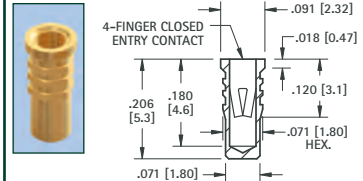
RoHS	NON-RoHS		Mtg. Hole Dia.
GOLD/GOLD	TIN/TIN	TIN/GOLD	
CAT. NO.	CAT. NO.	CAT. NO.	
1417	1437	1479	.076 (1.93)

**.032 (.81) - .046 (1.17) PIN - PRESS-FIT**



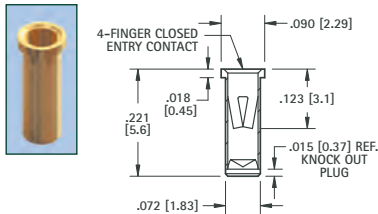
RoHS	NON-RoHS		Mtg. Hole Dia.
GOLD/GOLD	TIN/TIN	TIN/GOLD	
CAT. NO.	CAT. NO.	CAT. NO.	
1443	1446	1473	.078 (1.98)

**.032 (.81) - .046 (1.17) PIN - PRESS-FIT**



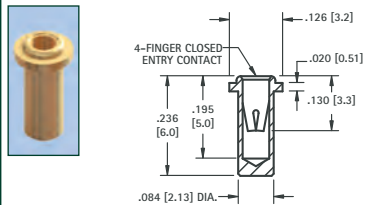
RoHS	NON-RoHS		Mtg. Hole Dia.
GOLD/GOLD	TIN/TIN	TIN/GOLD	
CAT. NO.	CAT. NO.	CAT. NO.	
1442	1445	1486	.079 (2.0)

**.032 (.81) - .046 (1.17) PIN - SOLDER MOUNT**



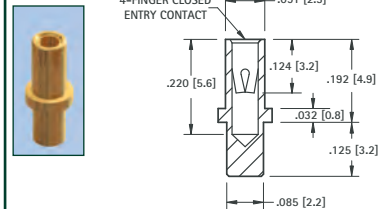
RoHS	NON-RoHS		Mtg. Hole Dia.
GOLD/GOLD	TIN/TIN	TIN/GOLD	
CAT. NO.	CAT. NO.	CAT. NO.	
1441	1444	1488	.076 (1.93)

**.032 (.81) - .046 (1.17) PIN - SOLDER MOUNT**



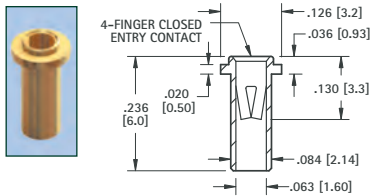
RoHS	NON-RoHS		Mtg. Hole Dia.
GOLD/GOLD	TIN/TIN	TIN/GOLD	
CAT. NO.	CAT. NO.	CAT. NO.	
1674	1675	1676	.087 (2.21)

**.032 (.81) - .046 (1.17) PIN - SOLDER MOUNT**



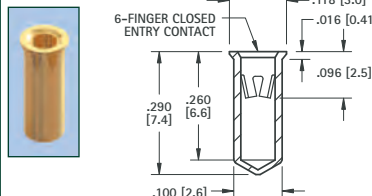
RoHS	NON-RoHS		Mtg. Hole Dia.
GOLD/GOLD	TIN/TIN	TIN/GOLD	
CAT. NO.	CAT. NO.	CAT. NO.	
1677	1678	1679	.089 (2.26)

**.032 (.81) - .046 (1.17) PIN - SOLDER MOUNT**



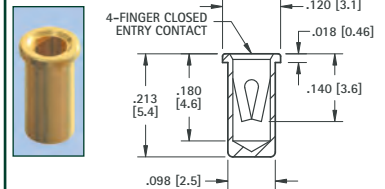
RoHS	NON-RoHS		Mtg. Hole Dia.
GOLD/GOLD	TIN/TIN	TIN/GOLD	
CAT. NO.	CAT. NO.	CAT. NO.	
1414	1434	1496	.089 (2.26)

**.040 (1.02) - .050 (1.27) PIN - SOLDER MOUNT**



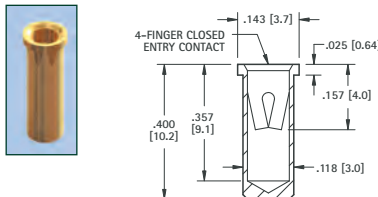
RoHS	NON-RoHS		Mtg. Hole Dia.
GOLD/GOLD	TIN/TIN	TIN/GOLD	
CAT. NO.	CAT. NO.	CAT. NO.	
1418	1438	1497	.104 (2.6)

**.048 (1.22) - .064 (1.63) PIN - SOLDER MOUNT**



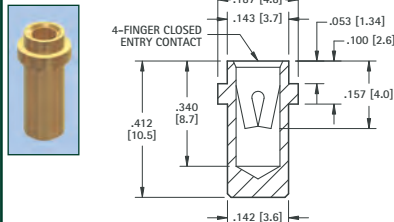
RoHS	NON-RoHS		Mtg. Hole Dia.
GOLD/GOLD	TIN/TIN	TIN/GOLD	
CAT. NO.	CAT. NO.	CAT. NO.	
1682	1683	1684	.102 (2.6)

**.065 (1.65) - .082 (2.08) PIN - SOLDER MOUNT**



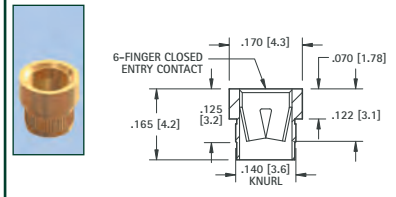
RoHS	NON-RoHS		Mtg. Hole Dia.
GOLD/GOLD	TIN/TIN	TIN/GOLD	
CAT. NO.	CAT. NO.	CAT. NO.	
1641A	1641B	1641C	.122 (3.1)

**.065 (1.65) - .082 (2.08) PIN - SOLDER MOUNT**



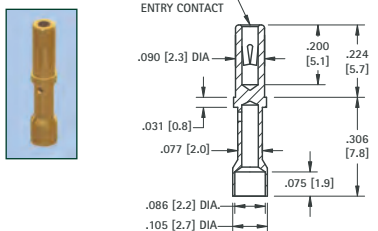
RoHS	NON-RoHS		Mtg. Hole Dia.
GOLD/GOLD	TIN/TIN	TIN/GOLD	
CAT. NO.	CAT. NO.	CAT. NO.	
1687	1688	1689	.146 (3.7)

**.084 (2.13) - .102 (2.6) PIN - PRESS-FIT**



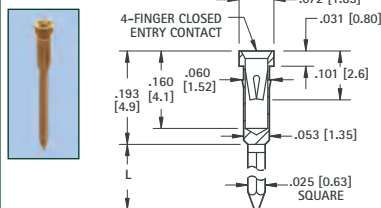
RoHS	NON-RoHS		Mtg. Hole Dia.
GOLD/GOLD	TIN/TIN	TIN/GOLD	
CAT. NO.	CAT. NO.	CAT. NO.	
1640A	1640B	1640C	.138 (3.5)

**.032 (.81) - .046 (1.17) PIN - CRIMP BARREL JACK**

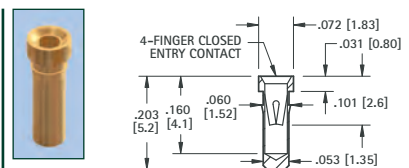


RoHS	NON-RoHS		
GOLD/GOLD	TIN/TIN	TIN/GOLD	
CAT. NO.	CAT. NO.	CAT. NO.	
3593	3594	3595	

**IC SOCKET CONTACTS FOR .015 (.38) - .025 (.64) LEADS - PRESS-FIT**



RoHS	NON-RoHS		L Length	Mtg. Hole Dia.
GOLD/GOLD	TIN/TIN	TIN/GOLD		
CAT. NO.	CAT. NO.	CAT. NO.		
3501	3505	3504	.360 (9.2)	.057
3502	3506	3508	.510 (13.0)	(1.45)



RoHS	NON-RoHS		Mtg. Hole Dia.
GOLD/GOLD	TIN/TIN	TIN/GOLD	
CAT. NO.	CAT. NO.	CAT. NO.	
3503	3507	3509	.057 (1.45)





- Precision engineered and manufactured
- Space saving design for high density packaging
- Micro pins are available in .017 (.43) to .080 (2.03) diameters
- Ideal for mating with our standard line of micro jacks
- Available for press-fit, swage or solder mounting
- Custom micro pins manufactured to your specifications
- Other platings available upon request

## SPECIFICATIONS

**Material:** Brass, ASTM-B16

**Plating:**

**Gold:** .000005 per MIL-G-45204

**Tin:** .000200 to .000300 per

MIL-T-10727, Type 1

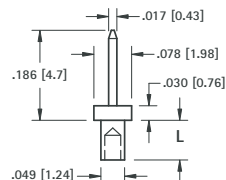
**RoHS** (RoHS Compliant)

## DASH NUMBERS (L Dimension)

- 1 for .032 (.81) thick Board
- 2 for .062 (1.57) thick Board
- 3 for .093 (2.36) thick Board
- 4 for .125 (3.2) thick Board

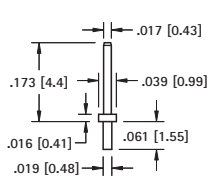
**Example:** 1967-1 for .032 (.81) thick Board  
1967-2 for .062 (1.57) thick Board

### .017 (.43) PIN - SWAGE MOUNT



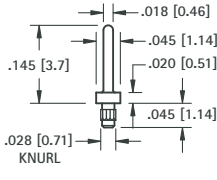
GOLD	TIN	L	Mtg. Hole
CAT. NO.	CAT. NO.	Length	Dia.
1967-1	1968-1	.051 (1.3)	.052 (1.32)
1967-2	1968-2	.082 (2.0)	

### .017 (.43) PIN - SOLDER MOUNT



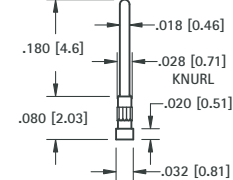
GOLD	TIN	Mtg. Hole
CAT. NO.	CAT. NO.	Dia.
1378-1	1379-1	.022 (.56)

### .018 (.46) PIN - PRESS-FIT



GOLD	TIN	Mtg. Hole
CAT. NO.	CAT. NO.	Dia.
1986-1	1987-1	.026 (.66)

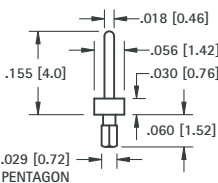
### .018 (.46) PIN - PRESS-FIT



**MATERIAL:** Phosphor Bronze

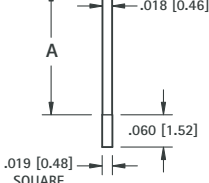
GOLD	TIN	Mtg. Hole
CAT. NO.	CAT. NO.	Dia.
1990-2	1991-2	.026 (.66)

### .018 (.46) PIN - PRESS-FIT



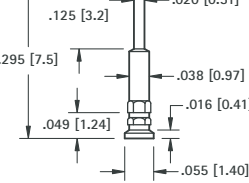
GOLD	TIN	Mtg. Hole
CAT. NO.	CAT. NO.	Dia.
1988-2	1989-2	.026 (.66)

### .018 (.46) PIN - PRESS-FIT



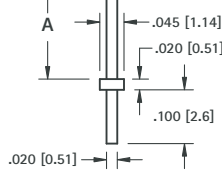
GOLD	TIN	A	Mtg. Hole
CAT. NO.	CAT. NO.	Dim.	Dia.
1992-2	1994-2	.243 (6.2)	.022 (.56)
1993-2	1995-2	.140 (3.6)	

### .020 (.51) PIN - PRESS-FIT



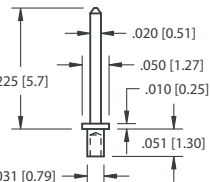
GOLD	TIN	Mtg. Hole
CAT. NO.	CAT. NO.	Dia.
1996-2	1997-2	.040 (1.01)

### .020 (.51) PIN - SOLDER MOUNT



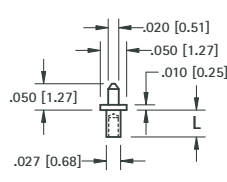
GOLD	TIN	A	Mtg. Hole
CAT. NO.	CAT. NO.	Dim.	Dia.
1998-3	2000-3	.250 (6.4)	.024 (.61)
1999-3	2001-3	.425 (10.8)	

### .020 (.51) PIN - SWAGE MOUNT



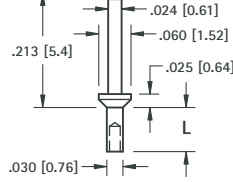
GOLD	TIN	Mtg. Hole
CAT. NO.	CAT. NO.	Dia.
1366-1	1367-1	.035 (.89)

### .020 (.51) PIN - SWAGE MOUNT



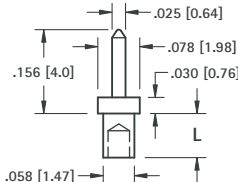
GOLD	TIN	L	Mtg. Hole
CAT. NO.	CAT. NO.	Length	Dia.
1372-1	1373-1	.051 (1.3)	.031 (.78)
1372-2	1373-2	.082 (2.1)	

### .024 (.61) PIN - SWAGE MOUNT



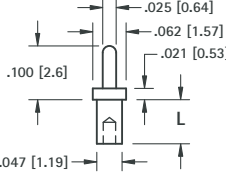
GOLD	TIN	L	Mtg. Hole
CAT. NO.	CAT. NO.	Length	Dia.
1406-1	1426-1	.047 (1.2)	.035 (.89)
1406-2	1426-2	.078 (1.9)	

### .025 (.64) PIN - SWAGE MOUNT



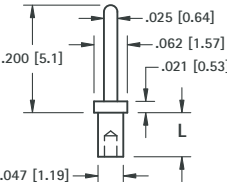
GOLD	TIN	L	Mtg. Hole
CAT. NO.	CAT. NO.	Length	Dia.
1408-1	1428-1	.062 (1.6)	.062 (1.57)
1408-2	1428-2	.094 (2.4)	

### .025 (.64) PIN - SWAGE MOUNT



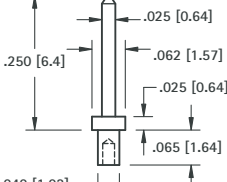
GOLD	TIN	L	Mtg. Hole
CAT. NO.	CAT. NO.	Length	Dia.
1404-1	1424-1	.051 (1.3)	.052 (1.32)
1404-2	1424-2	.082 (2.1)	

### .025 (.64) PIN - SWAGE MOUNT



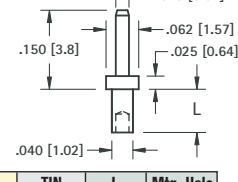
GOLD	TIN	L	Mtg. Hole
CAT. NO.	CAT. NO.	Length	Dia.
1407-1	1427-1	.051 (1.3)	.052 (1.32)
1407-2	1427-2	.082 (2.1)	

### .025 (.64) PIN - SWAGE MOUNT



GOLD	TIN	Mtg. Hole
CAT. NO.	CAT. NO.	Dia.
1401-1	1421-1	.043 (1.09)

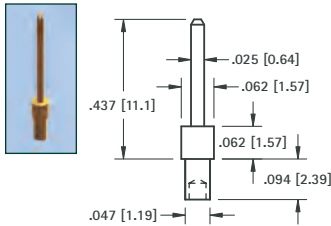
### .025 (.64) PIN - SWAGE MOUNT



GOLD	TIN	L	Mtg. Hole
CAT. NO.	CAT. NO.	Length	Dia.
1368-1	1369-1	.051 (1.3)	.043 (1.09)
1368-2	1369-2	.082 (2.1)	
1368-3	1369-3	.113 (2.9)	

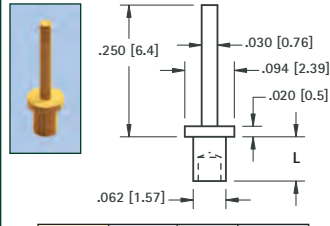


**.025 (.64) PIN - SWAGE MOUNT**



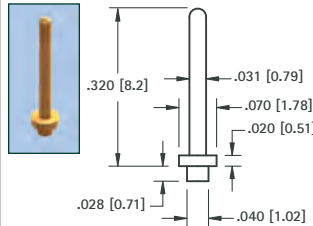
GOLD	TIN	Mtg. Hole Dia.
CAT. NO.	CAT. NO.	
1370-2	1371-2	.052 (1.32)

**.030 (.76) PIN - SWAGE MOUNT**



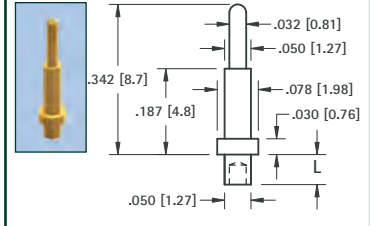
GOLD	TIN	L	Mtg. Hole Dia.
CAT. NO.	CAT. NO.	Length	
1374-1	1375-1	.051 (1.3)	.067 (1.70)
1374-2	1375-2	.082 (2.1)	
1374-3	1375-3	.113 (2.9)	

**.031 (.79) PIN - SOLDER MOUNT**



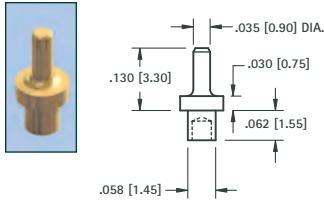
GOLD	TIN	Mtg. Hole Dia.
CAT. NO.	CAT. NO.	
1352-1	1353-1	.043 (1.09)

**.032 (.81) PIN - SWAGE MOUNT**



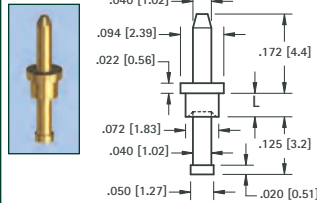
GOLD	TIN	L	Mtg. Hole Dia.
CAT. NO.	CAT. NO.	Length	
1354-1	1355-1	.051 (1.3)	.052
1354-2	1355-2	.082 (2.1)	(1.32)

**.035 (.90) PIN - SWAGE MOUNT**



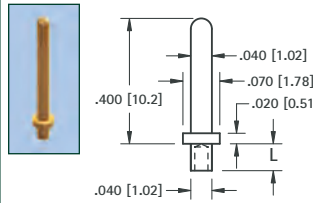
GOLD	TIN	Mtg. Hole Dia.
CAT. NO.	CAT. NO.	
1380-1	1381-1	.062 (1.57)

**.040 (1.0) PIN - SWAGE MOUNT**



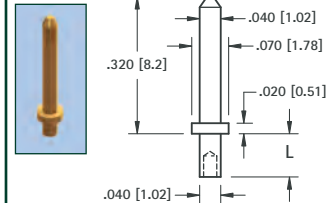
GOLD	TIN	L	Mtg. Hole Dia.
CAT. NO.	CAT. NO.	Length	
1356-1	1357-1	.051 (1.3)	.076 (1.93)
1356-2	1357-2	.082 (2.1)	
1356-3	1357-3	.113 (2.9)	

**.040 (1.0) PIN - SWAGE MOUNT**



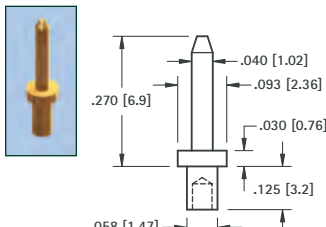
GOLD	TIN	L	Mtg. Hole Dia.
CAT. NO.	CAT. NO.	Length	
1358-1	1359-1	.051 (1.3)	.043 (1.09)
1358-2	1359-2	.082 (2.1)	

**.040 (1.0) PIN - SWAGE MOUNT**



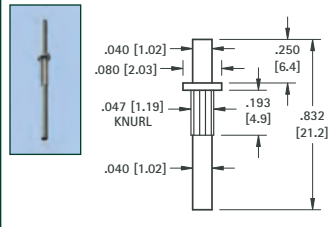
GOLD	TIN	L	Mtg. Hole Dia.
CAT. NO.	CAT. NO.	Length	
1405-1	1425-1	.051 (1.3)	.043 (1.09)
1405-2	1425-2	.082 (2.1)	
1405-3	1425-3	.113 (2.9)	

**.040 (1.0) PIN - SWAGE MOUNT**



GOLD	TIN	Mtg. Hole Dia.
CAT. NO.	CAT. NO.	
1402-3	1422-3	.062 (1.57)

**.040 (1.0) KAY PIN - PRESS-FIT**



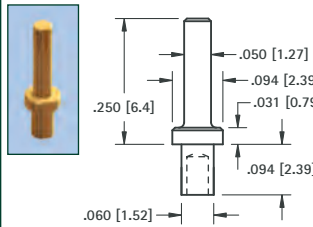
**MATERIAL:**

Solid Nickel Silver

**CAT. NO. 1218**

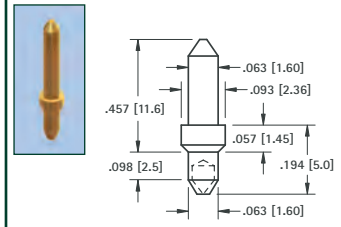
Mtg. Hole  
.043 (1.09) Dia.

**.050 (1.3) PIN - SWAGE MOUNT**



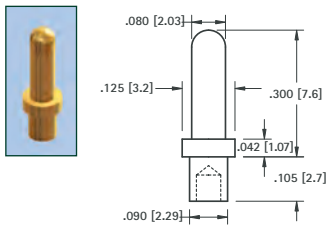
GOLD	TIN	Mtg. Hole Dia.
CAT. NO.	CAT. NO.	
1360-2	1361-2	.064 (1.63)

**.063 (1.6) PIN - SWAGE MOUNT**



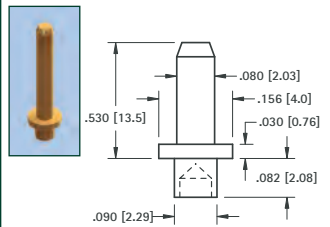
GOLD	TIN	Mtg. Hole Dia.
CAT. NO.	CAT. NO.	
1362-2	1363-2	.067 (1.70)

**.080 (2.0) PIN - SWAGE MOUNT**



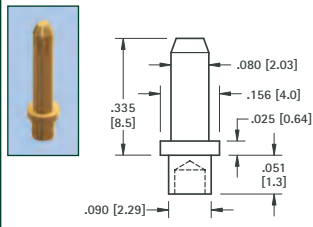
GOLD	TIN	Mtg. Hole Dia.
CAT. NO.	CAT. NO.	
1376-2	1377-2	.094 (2.38)

**.080 (2.0) PIN - SWAGE MOUNT**



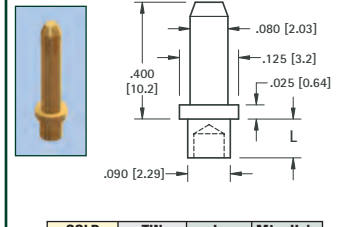
GOLD	TIN	Mtg. Hole Dia.
CAT. NO.	CAT. NO.	
1364-2	1365-2	.094 (2.38)

**.080 (2.0) PIN - SWAGE MOUNT**



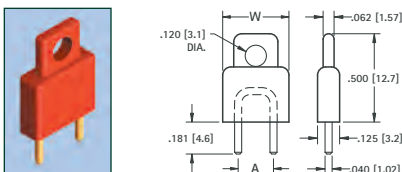
GOLD	TIN	Mtg. Hole Dia.
CAT. NO.	CAT. NO.	
1447-1	1455-1	.094 (2.38)

**.080 (2.0) PIN - SWAGE MOUNT**



GOLD	TIN	L	Mtg. Hole Dia.
CAT. NO.	CAT. NO.	Length	
1447-2	1455-2	.094 (2.4)	
1447-3	1455-3	.125 (3.2)	.094 (2.38)
1447-4	1455-4	.156 (4.0)	

**INSULATED SHORTING PIN**



BLUE	RED	BLACK	A	W
CAT. NO.	CAT. NO.	CAT. NO.	Dim.	Dim.
1460L	1460R	1460B	.200 (5.1)	.375 (9.5)
1461L	1461R	1461B	.250 (6.4)	.375 (9.5)
1462L	1462R	1462B	.400 (10.2)	.620 (15.7)
1463L	1463R	1463B	.500 (12.7)	.620 (15.7)

**MATERIAL:**

Insulator: Polypropylene

Blue, Red or Black

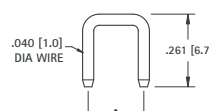
Pin: Brass, Gold Plate

**.040 (1.0) PINS**



Non-insulated	A
CAT. NO.	Dim.
1430-1	.200 (5.1)
1430-2	.250 (6.4)
1430-3	.300 (7.6)
1430-4	.400 (10.2)
1430-5	.500 (12.7)

**SHORTING PIN**

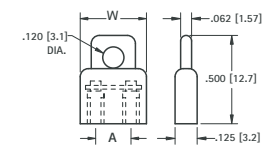


**MATERIAL:**

Pin: Brass,

Gold Plate

**INSULATED SHORTING JACK**



• For .040 (1.0) Pins

BLUE	RED	BLACK	A	W
CAT. NO.	CAT. NO.	CAT. NO.	Dim.	Dim.
1487L	1487R	1487B	.200 (5.1)	.375 (9.5)
1488L	1488R	1488B	.250 (6.4)	.375 (9.5)
1489L	1489R	1489B	.400 (10.2)	.620 (15.7)

**MATERIAL:**

Insulator:

Polypropylene

Blue, Red or Black

Spring: Beryllium

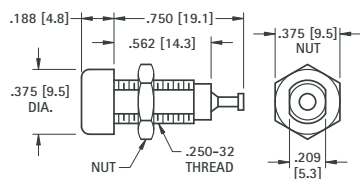
Copper, Gold Plate



## FULLY INSULATED DELUXE TIP JACK

ACCEPTS .080 (2.0) TIP WITH CLOSED ENTRY CONTACT

Fully molded body with recessed closed entry design. Assures maximum retention with .010 maximum contact resistance. Prevents accidental insertion of larger diameter probes. Current rating: 10 Amps. Breakdown voltage 5700V RMS. Capacitance to metal panel 2.0 pF nominal. Supplied with nut.



### MATERIAL:

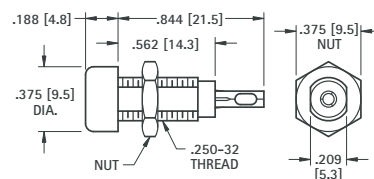
**Body:** Nylon 6/6 ASTM D4066  
**Contact:** Beryllium Copper, Silver Plate  
**Terminal:** Brass, Tin Plate

CAT. NO.	COLOR
6030	WHITE
6031	RED
6032	BLACK
6033	GREEN
6034	YELLOW
6035	BLUE

## FULLY INSULATED STANDARD TIP JACK

ACCEPTS .080 (2.0) TIP

Economical tip jacks with molded Nylon body. Low contact resistance. Formed Phosphor Bronze contact with solder hole for ease in attaching wire. Current rating 10 Amps. Breakdown voltage 5700 VRMS. Capacitance to metal panel 3.8 pF. Supplied with nut.



### MATERIAL:

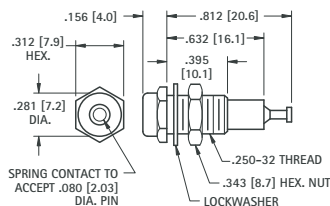
**Body:** Nylon 6/6 ASTM D4066  
**Contact:** Phosphor Bronze, Tin Plate

CAT. NO.	COLOR
6018	WHITE
6019	RED
6020	BLACK
6021	GREEN
6022	YELLOW
6023	BLUE

## METAL-CLAD TIP JACK (MIL)

ACCEPTS .080 (2.0) TIP WITH CLOSED ENTRY CONTACT

High quality tip jack for high reliability industrial applications. Ideal for use where required to withstand severe environmental conditions, temperature, vibration and salt spray. Recessed closed entry contact. Current rating 10 amps. Breakdown voltage: 5700V RMS. Made to MIL-C39024/10. Capacitance to metal panel 2.0 pF. Supplied complete with hardware.



### MATERIAL:

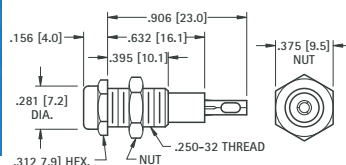
**Body:** Nylon 6/6  
ASTM D4066  
**Shell & Nut:** Brass QQ-B-626,  
Nickel Plate QQ-N-290  
**Contact:** Beryllium Copper  
for QQ-C-533. Gold Plate  
MIL-G-45204

CAT. NO.	COLOR
6012	WHITE
6013	RED
6014	BLACK
6015	GREEN

## METAL-CLAD TIP JACK (STD)

ACCEPTS .080 (2.0) TIP

Molded Nylon body with metal jacket. Contact is formed from phosphor bronze contact with solder hole for ease in attaching wire. Designed for positive contact, easy insertion and withdrawal. Current rating: 10 Amps. Breakdown voltage 5700V RMS. Capacitance to metal panel 3.8 pF. Supplied with nut.



### MATERIAL:

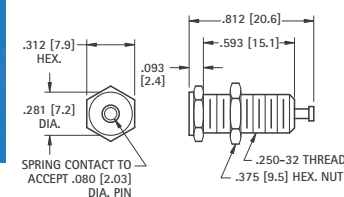
**Body:** Nylon 6/6  
ASTM D4066  
**Shell:** Brass, Nickel Plate  
**Contact:** Phosphor Bronze,  
Silver Plate

CAT. NO.	COLOR
6024	WHITE
6025	RED
6026	BLACK
6027	GREEN
6028	YELLOW
6029	BLUE

## UNINSULATED TIP JACK

ACCEPTS .080 (2.0) TIP

Quality, precision machined tip jack made of brass. Ideal for use on metal panels where grounding is required. Fits panels up to .375 (9.5) Thick. Supplied with nut.



### MATERIAL:

**Body:** Brass, Nickel Plate  
**Contact:** Beryllium Copper  
**Current Rating:** 15 Amps

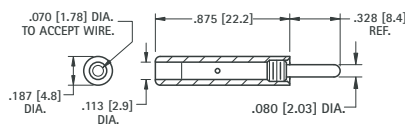
CAT. NO. 6097

## SOLDER TIP PLUGS

.080 (2.0) DIAMETER TIP



Designed for miniaturization where space is critical. Solder lead connection. Maximum reliability with minimum contact resistance. Base of tip is recessed to eliminate shock or grounding. Fits all standard jacks.



### MATERIAL:

**Tip:** Brass, Nickel Plate  
**Handle:** Nylon 6/6  
**Current Rating:** 10 Amps

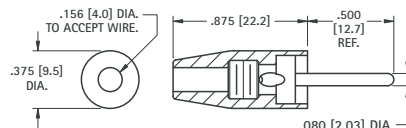
CAT. NO.	COLOR
6006	WHITE
6007	RED
6008	BLACK

## SOLDERLESS TIP PLUGS

.080 (2.0) DIAMETER TIP



Fully insulated molded nylon sleeve. Maximum reliability with minimum contact resistance. Recessed metal head eliminates possibility of shock or grounding. Designed for solderless connection of up to 16 gauge stranded wire which fits through handle and tip and is secured by screwing handle tight. Fits all standard tip jacks.



### MATERIAL:

**Tip:** Brass, Nickel Plate  
**Handle:** Nylon 6/6  
**Current Rating:** 10 Amps

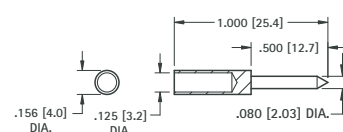
CAT. NO.	COLOR
6000	WHITE
6001	RED
6002	BLACK
6003	GREEN

## STANDARD PHONE TIP

.080 (2.0) DIAMETER TIP



Accepts up to 12 gauge wire. Fits all standard tip jacks.

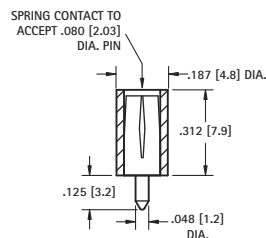


**MATERIAL:** Brass, Nickel Plate

CAT. NO. 1601



## VERTICAL

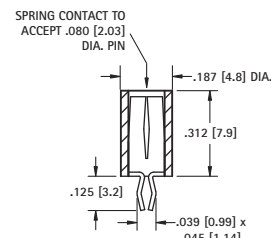


### MATERIAL:

Body: Nylon 6/6 ASTM D4066  
Contact: Brass, Silver Plate

CAT. NO.	COLOR
6036	WHITE
6037	RED
6038	BLACK
6039	YELLOW
6040	GREEN
6041	BLUE

## SNAP-FIT VERTICAL

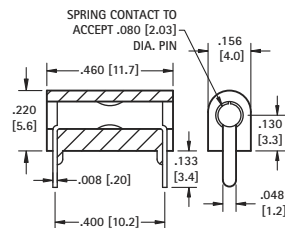


### MATERIAL:

Body: Nylon 6/6 ASTM D4066  
Contact: Beryllium Copper, Silver Plate  
Mounting: Snap-fits into .052 (1.32) hole

CAT. NO.	COLOR
6042	WHITE
6043	RED
6044	BLACK
6045	YELLOW
6046	GREEN
6047	BLUE

## LOW PROFILE HORIZONTAL

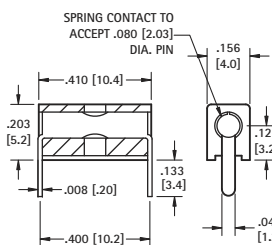


GOLD PLATE CAT. NO.	COLOR	SILVER PLATE CAT. NO.
6060	WHITE	6066
6061	RED	6067
6062	BLACK	6068
6063	YELLOW	6069
6064	GREEN	6070
6065	BLUE	6071

### MATERIAL:

Body: Nylon 6/6 ASTM D4066  
Contact: Beryllium Copper, Gold or Silver Plate

## HORIZONTAL/VERTICAL

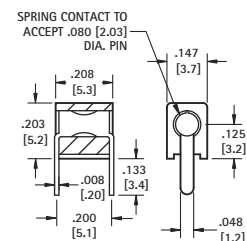


CAT. NO.	COLOR
6054	WHITE
6055	RED
6056	BLACK
6057	YELLOW
6058	GREEN
6059	BLUE

### MATERIAL:

Body: Nylon 6/6 ASTM D4066  
Contact: Beryllium Copper, Silver Plate

## MINIATURE HORIZONTAL



CAT. NO.	COLOR
6048	WHITE
6049	RED
6050	BLACK
6051	YELLOW
6052	GREEN
6053	BLUE

### MATERIAL:

Body: Nylon 6/6 ASTM D4066  
Contact: Beryllium Copper, Silver Plate

# HIGH TEMPERATURE PTFE INSULATED TEST POINT JACKS

## SPECIFICATIONS

Terminal Jack: Beryllium Copper (QQ-C-533)

\*Brass ASTM B16

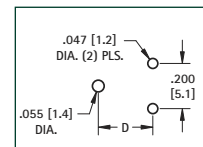
Plating: Gold per MIL-G-45204, Type II

Operating Temperature: -60°F to +500°F (-50°C to 260°C)

### Bushing:

White PTFE **RoHS** (RoHS Compliant)

Red or Black PTFE **RoHS** (Non-RoHS Compliant)



Mounting Detail



FIG. 1

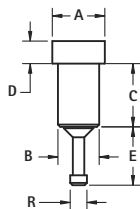


FIG. 2

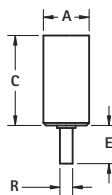
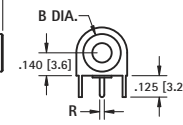
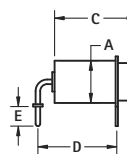


FIG. 3



RoHS			NON-RoHS													Accepts	
White	Red	Black	FIG.	A	B	C	D	E	R	Tip Dia. ± .001 (.03)	Tip Length						
CAT NO.	CAT NO.	CAT NO.															
11001	11001-R	11001-B	1	.142 (3.6)	.120 (3.1)	.244 (6.2)	.046 (1.2)	.120 (3.1)	.060 (1.5)	.040 (1.0)	.205 (5.2)						
11002	11002-R	11002-B	1	.142 (3.6)	.120 (3.1)	.283 (7.2)	.046 (1.2)	.120 (3.1)	.060 (1.5)	.040 (1.0)	.245 (6.2)						
11003	11003-R	11003-B	1	.172 (4.4)	.140 (3.6)	.142 (3.6)	.050 (1.3)	.060 (1.5)	.080 (2.0)	.040 (1.0)	.125 (3.2)						
11004	11004-R	11004-B	1	.172 (4.4)	.148 (3.8)	.179 (4.5)	.046 (1.2)	.120 (3.1)	.060 (1.5)	.040 (1.0)	.140 (3.6)						
11005	11005-R	11005-B	1	.218 (5.5)	.185 (4.7)	.301 (7.6)	.050 (1.3)	.105 (2.7)	.125 (3.2)	.080 (2.0)	.315 (8.0)						
11006	11006-R	11006-B	1	.218 (5.5)	.185 (4.7)	.271 (6.9)	.046 (1.2)	.120 (3.1)	.074 (1.9)	.080 (2.0)	.195 (4.9)						
11007	11007-R	11007-B	1	.218 (5.5)	.185 (4.7)	.271 (6.9)	.046 (1.2)	.120 (3.1)	.074 (1.9)	.090 (2.3)	.195 (4.9)						
11008	11008-R	11008-B	1	.218 (5.5)	.185 (4.7)	.301 (7.6)	.046 (1.2)	.120 (3.1)	.074 (1.9)	.080 (2.0)	.225 (5.7)						
11009	11009-R	11009-B	1	.218 (5.5)	.185 (4.7)	.400 (10.2)	.050 (1.3)	.187 (4.8)	.074 (1.9)	.080 (2.0)	.280 (7.1)						
11010	11010-R	11010-B	1	.218 (5.5)	.185 (4.7)	.271 (6.9)	.046 (1.2)	.136 (3.5)	.074 (1.9)	.080 (2.0)	.268 (6.8)						
11011	11011-R	11011-B	2	.218 (5.5)	-	.430 (10.9)	-	.150 (3.8)	.050 (1.3)	.080 (2.0)	.200 (5.1)						
11012*	11012-R*	11012-B*	2	.218 (5.5)	-	.500 (12.7)	-	.150 (3.8)	.050 (1.3)	.080 (2.0)	.280 (7.1)						
11013	11013-R	11013-B	3	.218 (5.5)	.187 (4.8)	.689 (17.5)	.500 (12.7)	.125 (3.2)	.050 (1.3)	.080 (2.0)	.500 (12.7)						
11014	11014-R	11014-B	3	.218 (5.5)	.187 (4.8)	.378 (9.6)	.400 (10.2)	.125 (3.2)	.050 (1.3)	.080 (2.0)	.250 (6.4)						
11015	11015-R	11015-B	3	.218 (5.5)	.187 (4.8)	.378 (9.6)	.400 (10.2)	.187 (4.7)	.035 (.89)	.080 (2.0)	.250 (6.4)						
11016	11016-R	11016-B	3	.218 (5.5)	.187 (4.8)	.378 (9.6)	.500 (12.7)	.125 (3.2)	.050 (1.3)	.080 (2.0)	.250 (6.4)						

\* Terminal Material: Brass ASTM B16



## SOCKET SPECIFICATIONS:

**Shell:** Nickel Plate  
**Insulator:** Thermoplastic, UL Rated 94V-0  
**Contacts:** Copper Alloy  
**Contact Area:** Gold Flash over Nickel  
**Solder Trails:** Tin over Nickel

## PLUG SPECIFICATIONS:

**Shell:** Steel, Nickel Plate  
**Insulator:** Thermoplastic, Rated UL 94V-0  
**Contact:** Bronze, Gold Flash over Nickel

## ELECTRICAL CHARACTERISTICS

**Rated Voltage:** 30V (RMS)  
**Contact Current Rating:** 1 Amp DC max.  
**Contact Resistance:** 15 mΩ max.  
**Insulation Resistance:** 1000 MΩ min.  
**Dielectric Withstanding Voltage:** 750V AC for 1 minute

## MECHANICAL CHARACTERISTICS

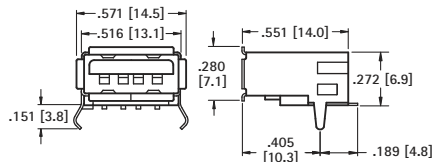
**Operating Temperature:** -13°F to +176°F (-25°C to 80°C)  
**Durability:** 1500 Cycles min.

## DEVICE APPLICATIONS

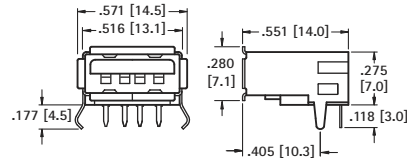
- Ability to daisy chain more than one input device
- Memory Sticks
  - Mouse/Keyboards
  - Printers/Scanners/Docking Stations
  - MP3/Audio Devices
  - Digital Video Cameras & Still Cameras
  - Portable Media Players
  - Gaming Headsets
  - Smart Phones/PDA's

## TYPE A SOCKETS

### SURFACE MOUNT



920



921

Mounting Detail Cat. No. 920



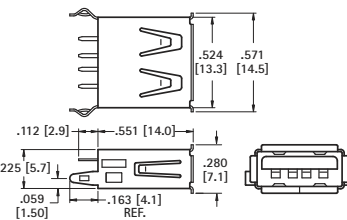
CAT. NO. 920

Mounting Detail Cat. No. 921



CAT. NO. 921

### VERTICAL

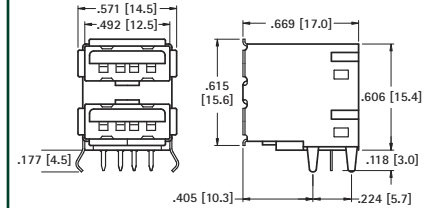
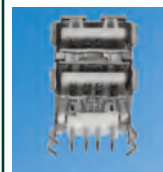


Mounting Detail



CAT. NO. 923

### DUAL STACKING



Mounting Detail



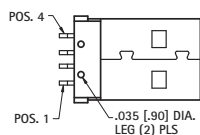
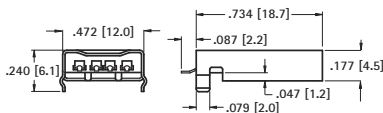
CAT. NO. 922

## TYPE A PLUGS

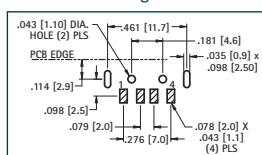
### FEATURES

- Available for on-board applications such as memory sticks
- Cable clamp style for creating custom cables
- Gold plated contacts for low contact resistance and excellent reliability

### SURFACE MOUNT

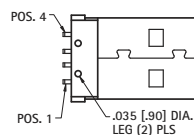
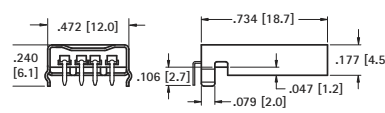


Mounting Detail

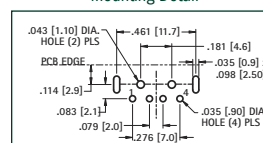


CAT. NO. 931

### THRU HOLE MOUNT



Mounting Detail

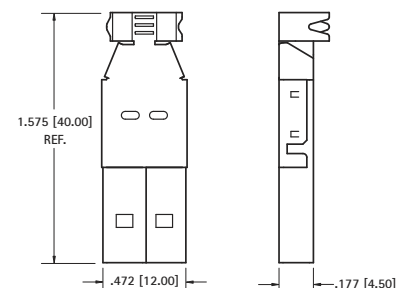


CAT. NO. 932

### CABLE PLUG



- Supplied unassembled
- Ideal for custom cable cordsets



CAT. NO. 925

# USB 2.0 PLUGS & SOCKETS



## SOCKET SPECIFICATIONS:

**Shell:** Nickel Plate  
**Insulator:** Thermoplastic, UL Rated 94V-0  
**Contacts:** Copper Alloy  
**Contact Area:** Gold Flash over Nickel  
**Solder Trails:** Tin over Nickel

## PLUG SPECIFICATIONS:

**Shell:** Steel, Nickel Plate  
**Insulator:** Thermoplastic, Rated UL 94V-0  
**Contact:** Bronze, Gold Flash over Nickel

## ELECTRICAL CHARACTERISTICS

**Rated Voltage:** 30V (RMS)  
**Contact Current Rating:** 1 Amp DC max.  
**Contact Resistance:** 15 mΩ max.  
**Insulation Resistance:** 1000 MΩ min.  
**Dielectric Withstanding Voltage:** 750V AC for 1 minute

## MECHANICAL CHARACTERISTICS

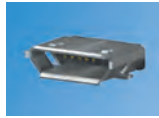
**Operating Temperature:** -13°F to 176°F (-25°C to 80°C)  
**Durability:** 1500 Cycles min.

## DEVICE APPLICATIONS

Ability to daisy chain more than one input device

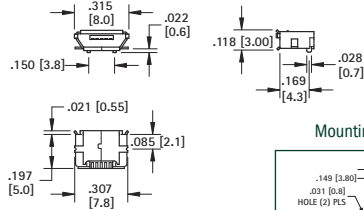
- Memory Sticks
- Mouse/Keyboards
- Printers/Scanners/Docking Stations
- MP3/Audio Devices
- Digital Video Cameras & Still Cameras
- Portable Media Players
- Gaming Headsets
- Smart Phones/PDA's

## MICRO-USB TYPE B SOCKETS/PLUGS

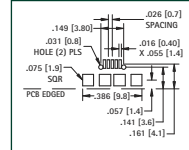


### SURFACE MOUNT SOCKET

AVAILABLE ON TAPE AND REEL



### Mounting Detail



**CAT. NO. 940** (Bulk)

**CAT. NO. 940TR** (Tape & Reel)

**Tape & Reel Spec's:** 24mm wide; 16mm pitch;  
 13 inch reel (1000 pieces per reel)

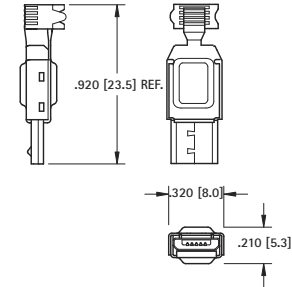
- Ideal for Miniature applications



- Supplied unassembled
- Ideal for custom cable cordsets

**CAT. NO. 941**

### CABLE PLUG

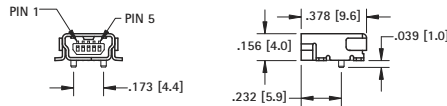


## MINI-USB TYPE B SOCKETS/PLUGS

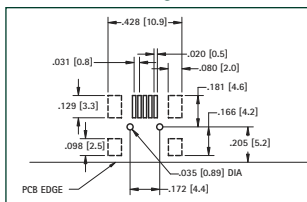


### SURFACE MOUNT SOCKET

AVAILABLE ON TAPE AND REEL



### Mounting Detail



**CAT. NO. 934** (Bulk)

**CAT. NO. 934TR** (Tape & Reel)

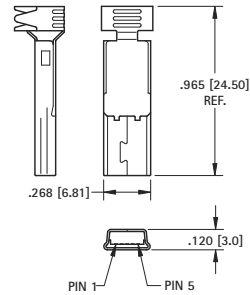
**Tape & Reel Spec's:** 24mm wide; 16mm pitch;  
 13 inch reel (1000 pieces per reel)



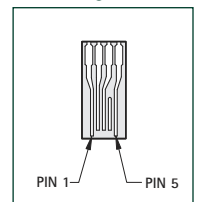
- Supplied unassembled
- Ideal for custom cable cordsets

**CAT. NO. 935**

### CABLE PLUG

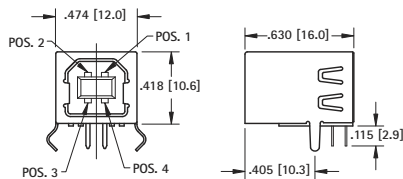


### Wiring Detail

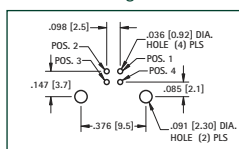


## USB TYPE B SOCKETS/PLUGS

### THRU HOLE SOCKET

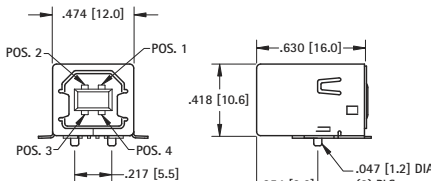


### Mounting Detail

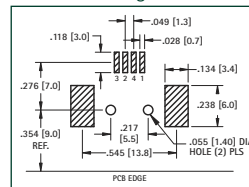


**CAT. NO. 924**

### SURFACE MOUNT SOCKET



### Mounting Detail

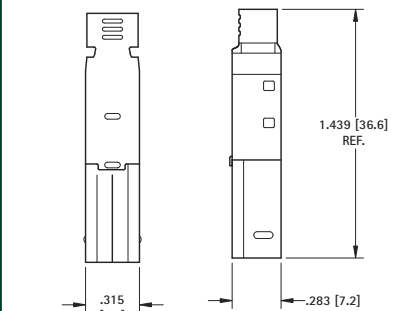


**CAT. NO. 933**

### CABLE PLUG



- Supplied unassembled
- Ideal for custom cable cordsets



**CAT. NO. 926**



## USB 3.0 & 3.1 SOCKETS & PLUGS

### ELECTRICAL CHARACTERISTICS:

**Rated Voltage:** 30V (RMS)  
**Contact Current Rating:** 1 Amp DC max.  
**Contact Resistance:** 15 mW max.  
**Insulation Resistance:** 1000 MW min.  
**Dielectric Withstanding Voltage:** 750V AC for 1 minute

### MECHANICAL CHARACTERISTICS:

**Operating Temperature:** -13°F to 176°F (-25°C to 80°C)  
**Durability:** 1500 Cycles min.

### USB 3.0 DESIGN ADVANTAGES:

**Port Expansion:** Alleviates restriction of limited COM Ports and available IRQ's  
**Compatibility:** Backward compatible with USB 2.0 devices  
**Fast Data Transfer:** Up to 4.8 Gbps; 10 times faster than USB 2.0 devices and 200 times faster than serial ports.

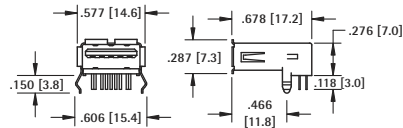
### USB 3.1 DESIGN ADVANTAGES:

**Compatibility:** Backwards compatible with 2.0 & 3.0 (adaptor required)  
**Data Rates:** Up to 10 Gbps; twice as fast as 3.0. Same connector on both sides of cable. No A & B style.

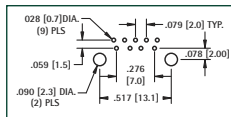
## USB 3.0 TYPE A SOCKET & PLUG



### THRU-HOLE MOUNT SOCKET



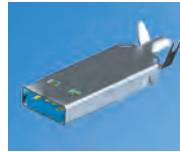
#### Mounting Detail



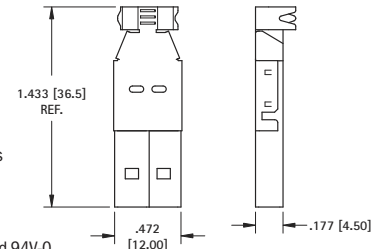
### SOCKET SPECIFICATIONS:

**Shell:** Steel, Nickel Plated  
**Insulator:** Thermoplastic, UL Rated 94V-0  
**Contacts:** Phosphor Bronze, Gold Flash over Nickel

**CAT. NO. 945**



### CABLE PLUG



- Supplied unassembled
- Ideal for custom cable cordsets

### PLUG SPECIFICATIONS:

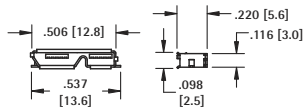
**Shell:** Steel, Nickel Plated  
**Insulator:** Thermoplastic, UL Rated 94V-0  
**Contacts:** Phosphor Bronze, Gold Flash over Nickel

**CAT. NO. 947**

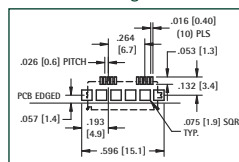
## MICRO-USB 3.0 TYPE B SOCKET & PLUG



### SURFACE MOUNT SOCKET



#### Mounting Detail



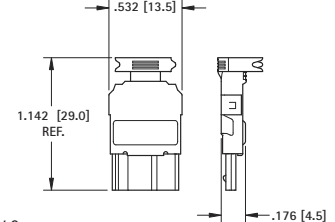
### SOCKET SPECIFICATIONS:

**Shell:** Steel, Nickel Plated  
**Insulator:** Thermoplastic, UL Rated 94V-0  
**Contacts:** Phosphor Bronze, Gold Flash over Nickel

**CAT. NO. 955**



### CABLE PLUG



- Supplied unassembled
- Ideal for custom cable cordsets

### PLUG SPECIFICATIONS:

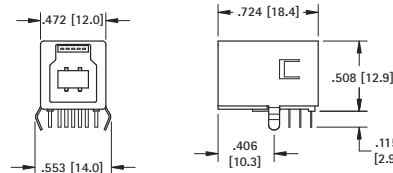
**Shell:** Steel, Nickel Plated  
**Insulator:** Thermoplastic, UL Rated 94V-0  
**Contacts:** Phosphor Bronze, Gold Flash over Nickel

**CAT. NO. 957**

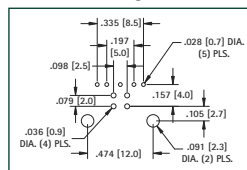
## USB 3.0 TYPE B SOCKET & PLUG



### THRU-HOLE MOUNT SOCKET



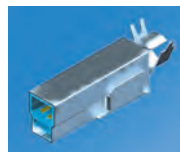
#### Mounting Detail



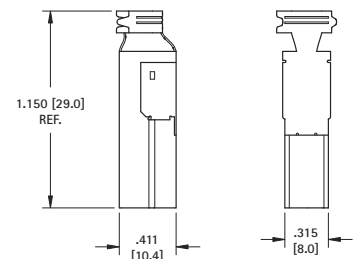
### SOCKET SPECIFICATIONS:

**Shell:** Phosphor Bronze, Nickel Plated  
**Insulator:** Thermoplastic, UL Rated 94V-0  
**Contacts:** Phosphor Bronze, Gold Flash over Nickel  
**Contact Area:** Gold Flash over Nickel  
**Solder Tails:** Tin over Nickel

**CAT. NO. 950**



### CABLE PLUG



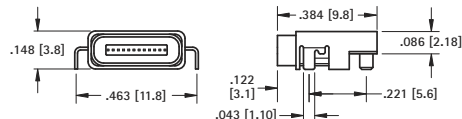
- Supplied unassembled
- Ideal for custom cable cordsets

### PLUG SPECIFICATIONS:

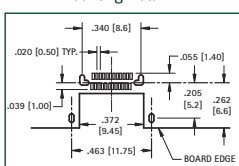
**Shell:** Steel, Nickel Plated  
**Insulator:** Thermoplastic, UL Rated 94V-0  
**Contacts:** Phosphor Bronze, Gold Flash over Nickel

**CAT. NO. 952**

## USB 3.1 TYPE C SOCKET & PLUG



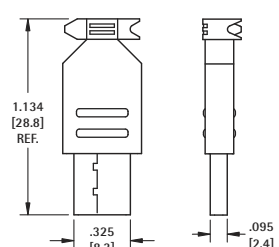
#### Mounting Detail



### SOCKET SPECIFICATIONS:

**Shell:** Steel, Nickel Plated  
**Insulator:** Thermoplastic, UL Rated 94V-0  
**Contacts:** Copper, Gold Plate (Flash)  
**Solder Tails:** Copper Alloy, Tin Plate

**CAT. NO. 953**



- Supplied unassembled
- Ideal for custom cable cordsets

### PLUG SPECIFICATIONS:

**Shell:** Steel, Nickel Plated  
**Insulator:** Thermoplastic, UL Rated 94V-0  
**Contacts:** Phosphor Bronze, Gold Plate (Flash)

**CAT. NO. 954**



# SURFACE MOUNT AUDIO JACKS



- Mates with 2.5mm and 3.5mm plugs
- Designed for reliable interface with audio equipment including computer speakers, headphones, sound cards, cell phones, etc.
- Models available for mono and stereo applications
- Low profile, surface mount design



## SPECIFICATIONS

**Housing:** LCP, UL Rated 94V-0

**Ground Terminal:** .012 (.30) Brass, Gold Flash

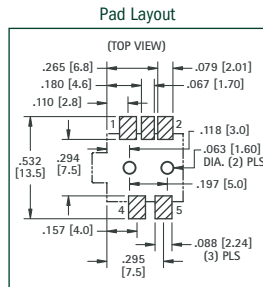
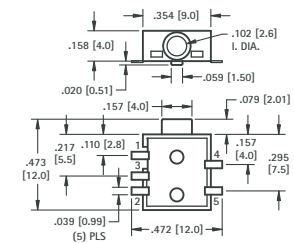
**Spring Contacts:** .008 (.20) Phosphor Bronze, Gold Flash

**Shunt Terminals:** .012 (.30) Brass, Gold Flash

### FOR 2.5 mm PLUGS

### SUPPLIED ON TAPE AND REEL

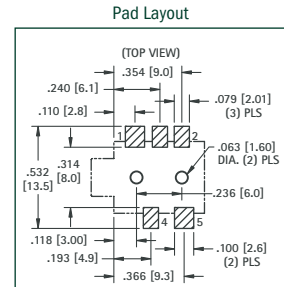
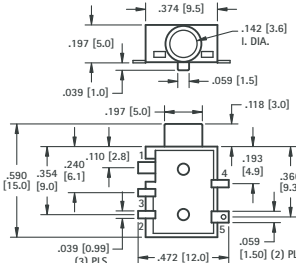
### FOR 3.5 mm PLUGS



## STEREO SCHEMATIC



## MONO SCHEMATIC



**CAT. NO. 980TR** (Stereo)

**CAT. NO. 982TR** (Mono)

**Tape Spec's:** 24mm wide; 16mm pitch  
**Reel Spec's:** 15 inch reel (1,000 pieces per reel)

**CAT. NO. 981TR** (Stereo)

**CAT. NO. 983TR** (Mono)

**Tape Spec's:** 24mm wide; 16mm pitch  
**Reel Spec's:** 15 inch reel (800 pieces per reel)

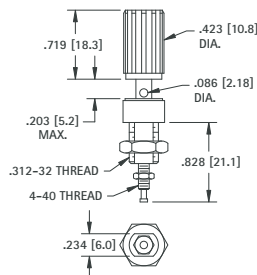
## BINDING POSTS

All Keystone binding posts are designed to prevent accidental contact with current carrying parts. They feature a "limited opening" captivated head to insure safety. Ideal for audio circuitry, R.F. circuitry, oscilloscopes, power supplies and various other applications.

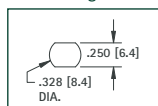
These multi-purpose binding posts feature high current rating, captivated heads and anti-rotation stud mounting.

**Note:** Binding Posts accept .175" (4.5) Banana Plugs, .080" (2.08) Tip Plugs, Spade Lugs, Alligator Clips, Wires and EZ hooks.

### STANDARD BINDING POST



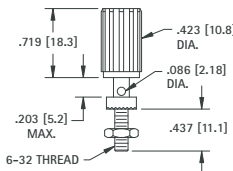
### Mounting Detail



For panels up to .281 (7.1) thick

CAT. NO.	COLOR
7004	RED
7005	BLACK

### UNINSULATED BINDING POST



### MATERIAL:

**Stud:** Brass per QQ-B-626

**Plating:** Nickel Plate

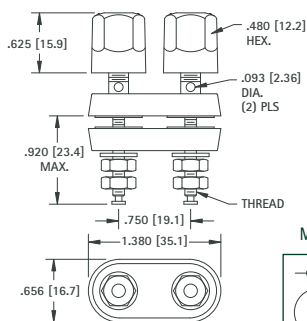
**Insulation:** Nylon 6/6

**Current Rating:** 15 Amps, 1000V AC Working

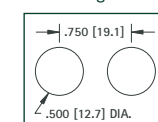
For panels up to .313 (8.0) thick

CAT. NO.	COLOR
7006	RED
7007	BLACK

### STANDARD DUAL HEX HEAD



### Mounting Detail



GOLD PLATE		NICKEL PLATE	
CAT. NO.	THREAD	CAT. NO.	THREAD
4108	8-32	7018	8-32
4109	10-32	7019	10-32

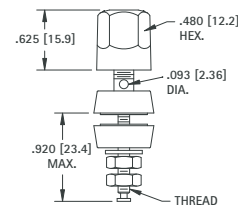
### MATERIAL:

**Stud:** Brass per ASTM B-16.

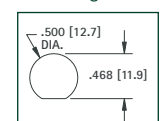
**Insulation:** Nylon 6/6

**Current Rating:** 30 Amps, 1000V AC Working

### STANDARD HEX HEAD



### Mounting Detail



GOLD PLATE			NICKEL PLATE		
CAT. NO.	THREAD	COLOR	CAT. NO.	THREAD	COLOR
4096	8-32	RED	4091	8-32	RED
4097	8-32	BLACK	4092	8-32	BLACK
7016	10-32	RED	4093	10-32	RED
7017	10-32	BLACK	4094	10-32	BLACK
7023	10-32	WHITE	4198	10-32	WHITE
7024	10-32	YELLOW	4199	10-32	YELLOW

### MATERIAL:

**Stud:** Brass per ASTM B-16.

**Insulation:** Nylon 6/6

**Current Rating:** 30 Amps, 1000V AC Working

# LARGE BANANA PLUGS - .300 (7.6)

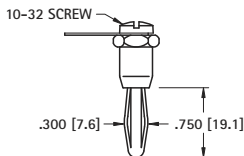
Current Ratings: Large: (.300) 40 Amps



Supplied Unassembled

**CAT. NO. 6073**

## INTERNAL THREAD



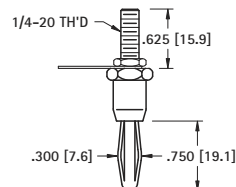
**MATERIAL:**  
Spring: Phosphor Bronze,  
Body: Brass, Nickel Plate



Supplied Unassembled

**CAT. NO. 6075**

## EXTERNAL THREAD

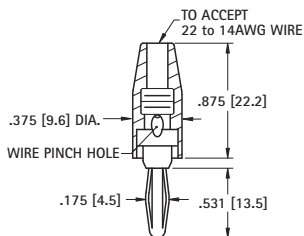


**MATERIAL:**  
Spring: Phosphor Bronze  
Body: Brass, Nickel Plate

# STANDARD BANANA PLUGS - .175 (4.5)

Current Ratings: Standard: (.175) 15 Amps

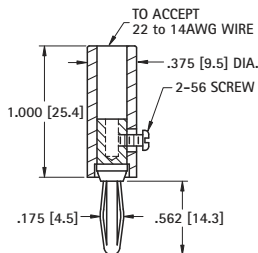
## SOLDERLESS CONNECTION



**MATERIAL:**  
Spring: Phosphor Bronze  
Body: Brass, Nickel Plate  
Handle: Nylon 6/6

CAT. NO.	COLOR
6078	RED
6079	BLACK

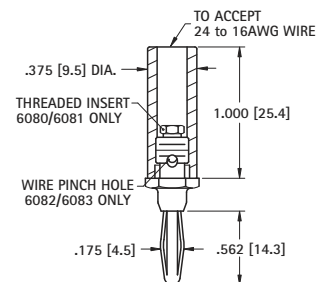
## SOLDERLESS WITH SET SCREW



**MATERIAL:**  
Spring: Phosphor Bronze  
Body: Brass, Nickel Plate  
Handle: Nylon 6/6

CAT. NO.	COLOR
6084	RED
6085	BLACK

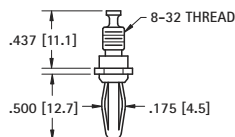
## INSULATED



RED	BLACK	WIRE CONNECTION
CAT. NO.	CAT. NO.	
6080	6081	SOLDER
6082	6083	SOLDERLESS

**MATERIAL:**  
Spring: Phosphor Bronze  
Body: Brass, Nickel Plate  
Handle: Nylon 6/6

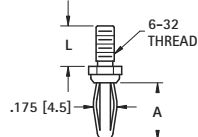
## SOLDER LUG



**MATERIAL:**  
Spring: Beryllium Copper  
Body: Brass, Nickel Plate

**CAT. NO. 652**

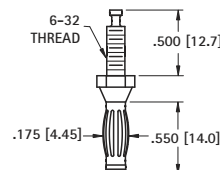
## FOUR LEAF SPRING



**MATERIAL:**  
Spring: Beryllium Copper (Cat. No. 653)  
Spring: Phosphor Bronze (Cat. No. 654, 655)  
Body: Brass, Nickel Plate

CAT. NO.	L	A
653	.500 (12.7)	.437 (11.1)
654	.188 (4.8)	.550 (14.0)
655	.500 (12.7)	.550 (14.0)

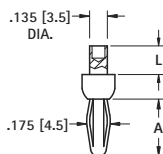
## BARREL SPRING



**MATERIAL:**  
Spring: Beryllium Copper  
Body: Brass, Nickel Plate

**CAT. NO. 657**

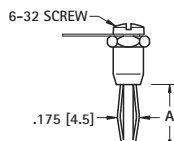
## STANDARD RIVET



**MATERIAL:**  
Four Leaf Spring: Phosphor Bronze  
Barrel Spring: Beryllium Copper  
Body: Brass, Nickel Plate

CAT. NO.	L	A	SPRING
552-3	.187 (4.7)	.437 (11.1)	4 leaf
658	.187 (4.7)	.550 (14.0)	barrel
552-4	.218 (5.5)	.437 (11.1)	4 leaf

## INTERNAL THREAD

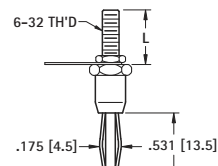


Supplied Unassembled

**MATERIAL:**  
Four Leaf Spring: Phosphor Bronze  
Barrel Spring: Beryllium Copper  
Body: Brass, Nickel Plate

CAT. NO.	A	SPRING
6072	.531 (13.5)	4 leaf
659	.550 (14.0)	barrel

## EXTERNAL THREAD



Supplied Unassembled

CAT. NO.	L
6074-1	.375 (9.5)
6074-2	.750 (19.1)

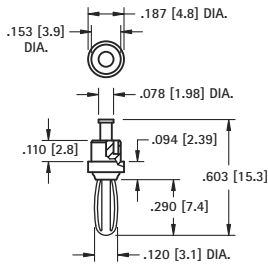
**MATERIAL:**  
Spring: Phosphor Bronze  
Body: Brass, Nickel Plate

# MINI BANANA PLUGS – .120 (3.0)

Current Ratings: Miniature: (.120) 10 Amps



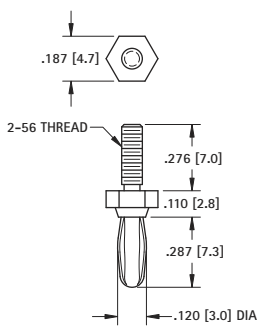
## SWAGE MOUNT



**CAT. NO. 452**

**MATERIAL:**  
**Spring:** Beryllium Copper  
**Body:** Brass, Silver Plate

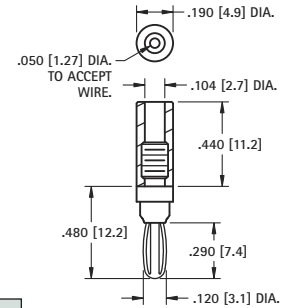
## THREADED



**CAT. NO. 450**

**MATERIAL:**  
**Spring:** Beryllium Copper, Nickel Plate  
**Body:** Brass, Silver Plate

## SOLDER CONNECTION

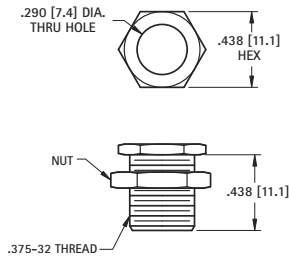


CAT. NO.	COLOR
6076	RED
6077	BLACK
451	NONE

**MATERIAL:**  
**Spring:** Beryllium Copper, Nickel Plate  
**Body:** Brass, Nickel Plate  
**Handle:** Nylon

# BANANA JACKS

## LARGE BANANA JACK



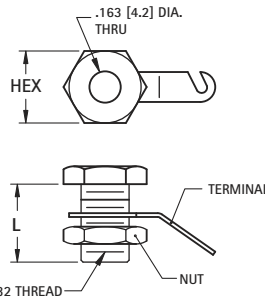
Accepts  
.300 (7.6)  
Plug

Supplied Unassembled

**CAT. NO. 6098**

**MATERIAL:**  
**Body:** Brass, Nickel Plate  
**Terminal:** Brass, Tin Plate

## NON-INSULATED STANDARD JACKS



Accepts  
.175 (4.5)  
Plug

**MATERIAL:**

**Body:** Brass, Nickel Plate  
**Terminal:** Brass, Tin Plate

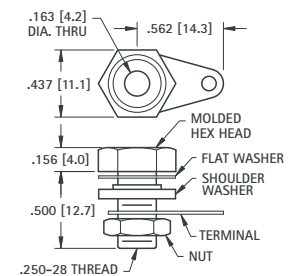
Supplied with nut and lug. Unassembled

CAT. NO.	HEX	L	DESCRIPTION
6095	.375 (9.5)	.406 (10.3)	Resessed head
6096	.312 (7.9)	.500 (12.7)	Narrow Head

## INSULATED STANDARD JACKS



Accepts  
.175 (4.5)  
Plug



Supplied with hardware  
Unassembled

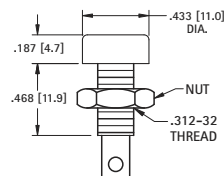
CAT. NO.	HEAD COLOR
6093	RED
6094	BLACK

**MATERIAL:**  
**Body:** Brass, Nickel Plate  
**Terminal:** Copper, Tinned  
**Hex Head:** Phenolic

## FULLY INSULATED STANDARD JACKS



Accepts  
.175 (4.5)  
Plug

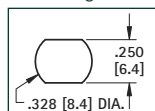


**MATERIAL:**

**Body:** Nylon  
**Contact:** Brass, Tin Plate

CAT. NO.	COLOR
6091	RED
6092	BLACK

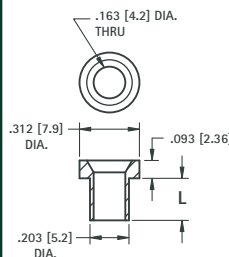
Mounting Detail



## SWAGE MOUNT

### STANDARD

Accepts  
.175 (4.5)  
Plug



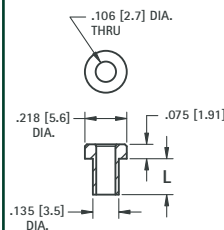
**MATERIAL:**

Brass, Nickel Plate

CAT. NO.	L
575-4	.218 (5.5)
575-6	.265 (6.7)
575-8	.350 (8.9)

### MINIATURE

Accepts  
.120 (3.0)  
Plug



**MATERIAL:**

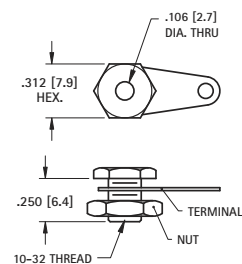
Brass, Tin Plate

CAT. NO.	L
476-2	.125 (3.2)
476-3	.165 (4.2)
476-4	.187 (4.7)

## MINIATURE BANANA JACK



Accepts  
.120 (3.0)  
Plug



Supplied with lug and nut.  
Unassembled

**CAT. NO. 6090**

**MATERIAL:**  
**Body:** Brass, Nickel Plate  
**Terminal:** Copper, Tinned





# IP68 DUST & WATER RESISTANT 8P8C NETWORK CONNECTORS

These RJ45 plugs and sockets are IP68 rated for underwater, dust and other harsh environments once assembled. Sockets available as direct PC mount, Panel mount or with IDC connection for CAT 5e cables. When not in use covers available to keep socket clean and dry.

## ENVIRONMENTAL/ELECTRICAL PROPERTIES:

**Ingress Protection:** IP68 rated  
**Voltage Rating:** 125 VAC RMS  
**Compliance:** IEE and IEC Compliant  
**Voltage Rating:** 125 VAC RMS  
**Data Rate:** 100Base-T (Fast Ethernet)

## MECHANICAL PROPERTIES:

**Operating Temp:** -15°F to 175°F (25°C to 80°C)  
**Durability:** 500 cycles min.  
**Body:** High Temperature Thermoplastic, UL 94V-0  
**Gasket:** Silicon  
**Contacts:** Phosphor Bronze, Gold plated  
**Solder Tails:** Phosphor Bronze, Tin Plate

## APPLICATIONS:

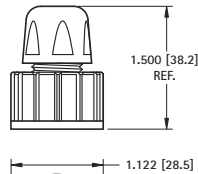
- Utility Grid
- Outdoor POS (point of Sale)
- Factory Wash down PLCs
- Marine Network connections



### PLUG



Plug to be installed over standard 8P8C network cable.



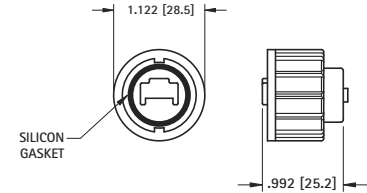
SILICON GASKET

CAT. NO. 988P

### SOCKET COVER



Cover to be used when socket is not in use to maintain IP68 rating.

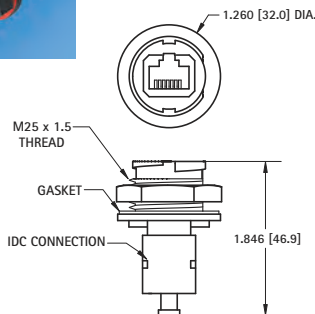


CAT. NO. 989C

### IDC PANEL MOUNT SOCKET



Insulation Displacement Connector - Quick punch down wire connection. No need to strip wires before making connection.

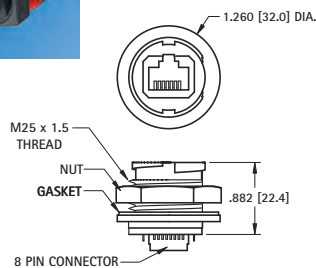


CAT. NO. 987

### PANEL MOUNT SOCKET



Supplied with 8 pin connector on back side. Patch cable available: Cat. No. 961H



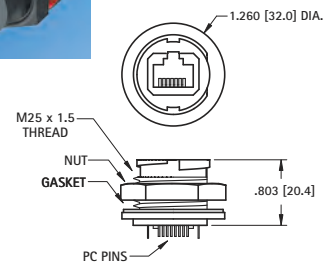
CAT. NO. 986 - Socket

CAT. NO. 961H - Patch Cable

### THM SOCKET



Tin Plated PC pins allow for direct connection of socket to PCB.



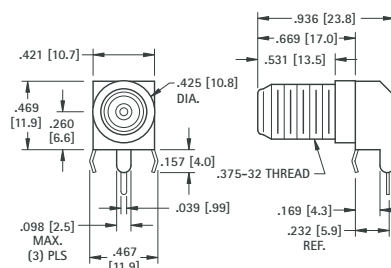
CAT. NO. 985

## "F" FEMALE COAXIAL CONNECTOR

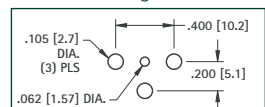


- Low profile
- Snap-fit mounting for positive retention during wave soldering
- Rugged, stable construction facilitates reliable mating
- High reliability, manufactured using Nickel Plated Brass bodies and Tin Plated Brass contacts

### SNAP-FIT PC MOUNT



### Mounting Detail



### MATERIAL:

**Shell:** Steel, Tin Plate  
**Body:** Brass, Nickel Plate  
**Contacts:** Brass, Tin Plate

CAT. NO. 911

## ELECTRICAL CHARACTERISTICS:

**Operating Voltage:** 125 VAC max.  
**Current Rating:** 1.5 Amp max.  
**Contact Resistance:** 40mΩ max.  
**Insulation Resistance:** 1,000 MΩ min  
**Dielectric Withstanding Voltage:** 1,000 VAC for 1 minute

## MECHANICAL CHARACTERISTICS:

**Durability:** 500 Cycles  
**Operating Temperature:** -40°F to 185°F (-20°C to 75°C)  
**Packaging:** Anti-ESD plastic trays

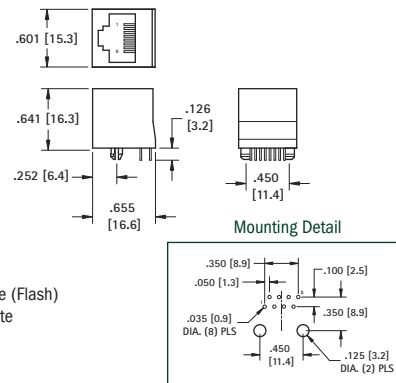
## APPLICATIONS:

- Network Equipment
- Modem
- Hub
- Switch
- Router
- Gateway
- Repeater
- Bridge
- PC motherboard
- Laptops & Notebooks



- Allows connector to board perpendicular to PC board

## VERTICAL ENTRY



## SOCKET SPECIFICATIONS:

**Body:** PBT UL 94V-0- Black  
**Contacts:** Phosphor Bronze, Gold Plate (Flash)  
**Solder Tails:** Phosphor Bronze, Tin Plate

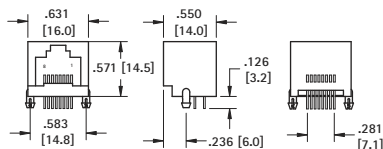
**CAT. NO. 949**

## HORIZONTAL ENTRY



- Small PC footprint ideal for high density applications

## THM-COMPACT



Mounting Detail

## SOCKET SPECIFICATIONS

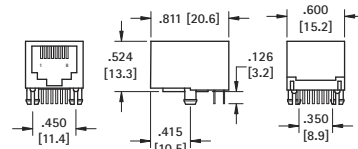
**Body:** PBT UL 94V-0- Black  
**Contacts:** Phosphor Bronze, Gold Plate (Flash)  
**Solder Tails:** Phosphor Bronze, Tin Plate

**CAT. NO. 942**



- Extra long connector extends past PC board for access to port thru case

## THM-EXTENDED



Mounting Detail

## SOCKET SPECIFICATIONS

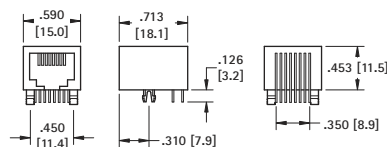
**Body:** PBT UL 94V-0- Black  
**Contacts:** Phosphor Bronze, Gold Plate (Flash)  
**Solder Tails:** Phosphor Bronze, Tin Plate

**CAT. NO. 948**



- Low Height ideal for compact designs

## THM-LOW PROFILE



Mounting Detail

## SOCKET SPECIFICATIONS:

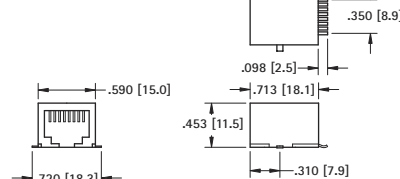
**Body:** PBT UL 94V-0- Black  
**Contacts:** Phosphor Bronze, Gold Plate (Flash)  
**Solder Tails:** Phosphor Bronze, Tin Plate

**CAT. NO. 943**



- Low Height ideal for compact designs

## SMT-LOW PROFILE



Mounting Detail

## SOCKET SPECIFICATIONS:

**Body:** PBT UL 94V-0- Black  
**Contacts:** Phosphor Bronze, Gold Plate (Flash)  
**Solder Tails:** Phosphor Bronze, Nickel Plate

**CAT. NO. 944**

# KEYSTONE JACKS (RJ45 8P8C)



Front



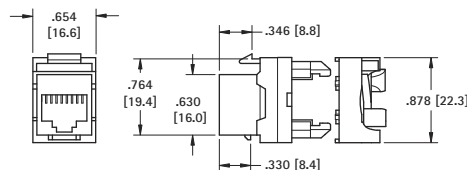
Back

- Color Coded for easy assembly
- Toolless punch down design

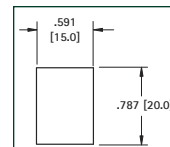
1. Strip approximately 1.5" of the cable jacket. Fold back shield/ground.
2. Attach wires to cover following the color coding markings.\*

3. Align cover to module. Be sure to align polarity tab.

4. Twist locking mechanism to punch down the wires and lock the cover onto the module.
5. Trim extra wire from housing. Ready to be installed into panel



Panel Cutout



## SOCKET SPECIFICATIONS:

**Body:** PC UL 94V-0  
**Contacts:** Phosphor Bronze, Gold Plate (Flash)  
**IDC Contacts:** Phosphor Bronze, Nickel Plate  
 Accepts #24-26 AWG wire

**CAT. NO. 946**

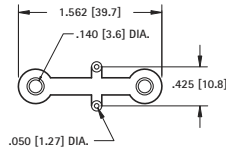
\*Color coding for both T568A/T568B wiring schemes. Both ends of cable should match unless creating a crossover cable.

## TRANSISTOR MOUNTS

Molded Transistor Mounts provide all of the necessary bushings and insulators to quickly mount power transistors.



### For TO-3 CASES

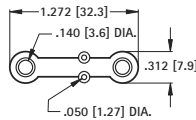


#### MATERIAL:

Nylon 6/6 - 94V-2

**CAT. NO. 4616**

### For TO-66 CASES



#### MATERIAL:

Nylon 6/6 - 94V-2

**CAT. NO. 4617**

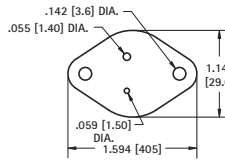
## TRANSISTOR INSULATORS

Mica Insulators provide good thermal conductivity and superior electrical insulation.

#### SPECIFICATIONS:

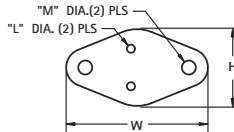
**Material:** .003 (.08) Natural Mica  
**Thermal Conductivity:** .71 W/(m K)  
**Dielectric Constant:** 7 @ 1000 Khz

### FOR TO-3 CASES



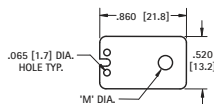
**CAT. NO. 4662**

### FOR TO-3 CASES



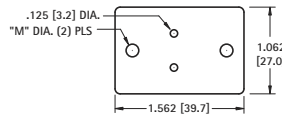
CAT. NO.	H	W	M Dia.	L Dia.
4651	1.093 (27.8)	1.625 (41.3)	.166 (4.2)	.093 (2.4)
4653	1.063 (27.0)	1.655 (42.1)	.166 (4.2)	.166 (4.2)
4636	1.063 (27.0)	1.655 (42.1)	.166 (4.2)	.052 (1.3)

### FOR TO-220 CASE (3-PIN)



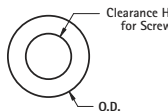
CAT. NO.	M	LEADS
4671	.141 (3.6)	2
4672	.141 (3.6)	3
4673	.115 (2.9)	3

### FOR TO-3 CASES



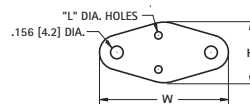
**CAT. NO. 4661**

### FOR THREADED STUD TRANSISTORS



CAT. NO.	OD	Screw
4678	.375 (9.5)	4
4679	.375 (9.5)	6
4680	.500 (12.7)	8
4681	.625 (15.9)	10
4682	.750 (19.0)	1/4

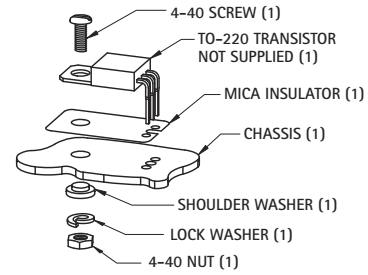
### FOR TO-66 CASES



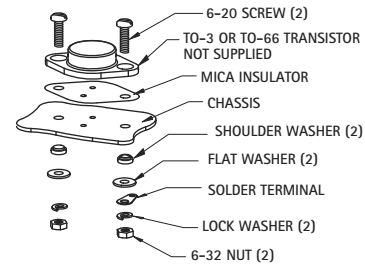
CAT. NO.	H	W
4664	.750 (19.1)	1.500 (38.1)
4666	.780 (19.9)	1.375 (34.9)

## TRANSISTOR MOUNTING KITS

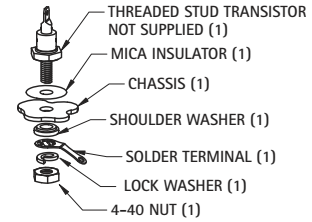
- Each kit provides everything needed to mount, isolate and connect to power transistors
- Transistor not included
- See diagrams below for complete list of items included



**CAT. NO. 4724** - TO-220 Complete Mtg Kit

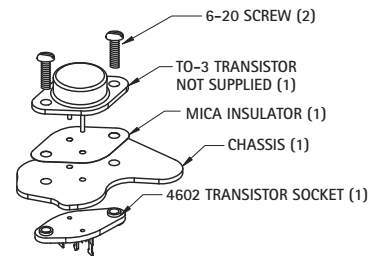


**CAT. NO. 4725** - TO-3 Complete Mtg Kit

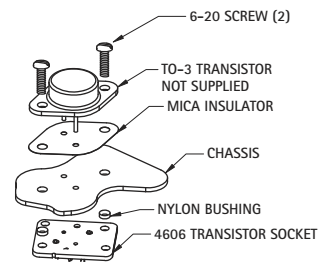


**CAT. NO. 4729** - DO-4, TO-60, TO-62 Complete Mtg Kit

**CAT. NO. 4730** - DO-5, TO-48, TO-61 Complete Mtg Kit



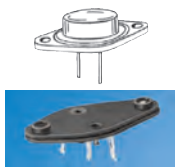
**CAT. NO. 4732** - TO-3 Complete Mtg Kit



**CAT. NO. 4734** - TO-3 Complete Mtg Kit



# SOCKETS FOR TO-3 CASE



## PANEL MOUNT

### MATERIAL:

**Base:** Phenolic, Grade PBE, Type XP

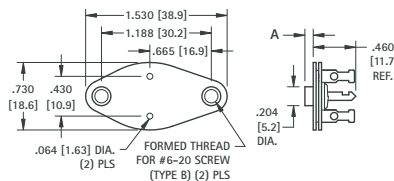
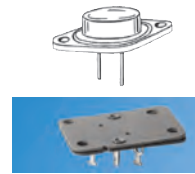
**Contacts:** Brass, Tin Plate

**Top Plate:** Nylon, ASTM-D4066

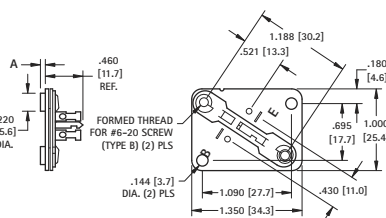
Phenolic, Grade PBE, Type

XP (Cat. No. 4606 only)

**Collector Plate:** Steel, Tin Plate



CAT. NO.	A DIM.
4603	.030 (.76)
4602	.045 (1.14)
4601	.090 (2.29)



CAT. NO.	A DIM.
4606	NONE
4608	.045 (1.14)

## PC MOUNT



### MATERIAL:

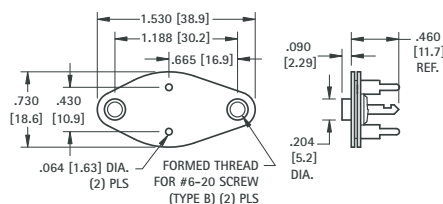
**Top Plate:** Molded Nylon

**Base:** Phenolic

**Contacts:** Brass, Tin Plate

**Collector Plate:** Steel, Tin Plate

CAT. NO. 4600



### Bottom View Mounting Detail

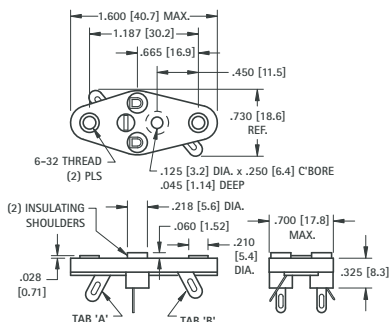


# HEAVY DUTY SOCKET FOR TO-3 CASE

## CHOICE OF SINGLE OR DUAL COLLECTOR SOLDER TABS

Features an all-in-one mounting plate and solder tabs, providing complete electrical isolation of the solder tab connections.

Rated 5 Amps DC continuous and 15 Amps DC Intermittent



### MATERIAL:

**Base:** PBT, UL Rated 94V-0

**Contacts:** Brass, Tin Plate

**Collector Plate:** Brass, Tin Plate

### With transistor lead-in insulating shoulders

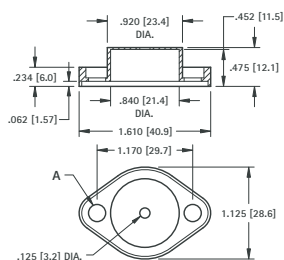
CAT. NO.	WITH TAB
4513	"A" ONLY
4514	"A" & "B"

### Less transistor lead-in insulating shoulders

CAT. NO.	WITH TAB
4515	"A" ONLY
4516	"A" & "B"

# NYLON TO-3 CASE COVERS

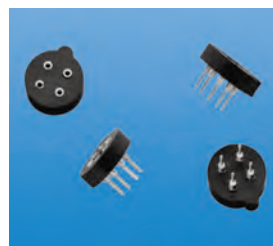
Molded nylon covers easily mount over and insulate the power transistor. Will withstand temperatures to approximately 250°F (121°C).



**MATERIAL:** Nylon 6/6, UL Rated 94V-2

CAT. NO.	FOR	EYELETS INSTALLED	A
4632	TO-3	NONE	.210 (5.3)
4634	TO-3	TWO	.140 (3.6)

# SOCKETS FOR TO-5 & TO-100



Fully molded compact construction. Speeds transistor assembly. Incorporates ultra high quality, closed entry, sleeve type contacts. Accepts .016 (.41) to .020 (.51) diameter leads or .010 (.25) x .018 (.46) rectangular transistor leads.

### MATERIAL:

**Insulator:** Glass Filled Polyester, UL Rated 94V-0

**Contact Pin:** Brass, Tin-Lead Plate

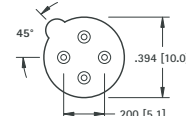
**RoHS** (Non-RoHS Compliant)

**Contact Spring:** Beryllium Copper, .000030 min. Gold Plate

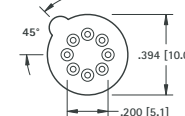
CAT. NO.	FOR	PINS
4590	TO-5	3
4591	TO-5	4
4592	TO-5	8
4593	TO-100	8
4594	TO-100	10



Cat. No. 4590



Cat. No. 4591



Cat. No. 4592



## PHONO PLUGS

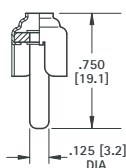
- Mates with .125 (3.2) diameter jacks

### CONVENTIONAL TYPE

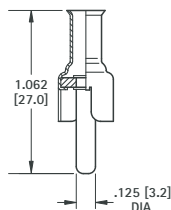
#### MATERIAL:

Shell: Brass, Nickel Plate

Pin: Brass, Nickel Plate



CAT. NO. 561 - Crimp Type



CAT. NO. 567 - Conventional Type

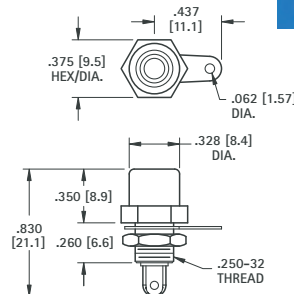
## PANEL MOUNT PHONO JACKS

- Mates with .125 (3.2) dia. pin
- Mounts to panel in .296 (7.6) dia. hole
- Color coded for ease of identification
- Complete with nut and solder lug



MATERIAL: Brass, Nickel Plate

HEX BASE CAT. NO.	INSULATOR COLOR	ROUND BASE CAT. NO.
581	WHITE	598
582	RED	580
576	BLACK	574
583	YELLOW	599



## SNAP-FIT 90° P.C. PHONO JACKS

### CHOICE OF TIN OR GOLD PLATE

- Complete one piece jack for insertion into PC board
- Time Saving
- No Wiring Required
- Snap-fits into PC board



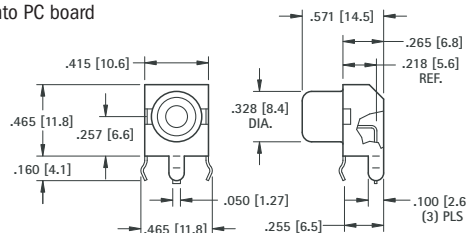
#### MATERIAL:

Shell: Steel

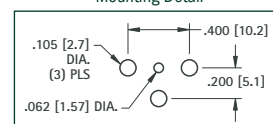
Contact: Brass

Plating: Tin or Gold Plate

TIN PLATE CAT. NO.	INSULATOR COLOR	GOLD PLATE CAT. NO.
587	WHITE	936
588	RED	937
901	BLACK	900
589	YELLOW	938



#### Mounting Detail



## SNAP-FIT VERTICAL P.C. PHONO JACKS

- Extra long, one piece shell to accept plugs with longer pins for greater contact
- Snaps into holes on PC board and firmly held for soldering
- No staking required

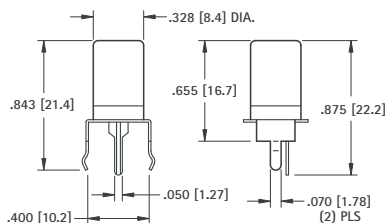


#### MATERIAL:

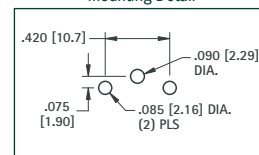
Shell: Steel, Nickel Plate

Contact: Brass, Tin Plate

CAT. NO.	INSULATOR COLOR
584	WHITE
577	RED
585	BLACK
586	YELLOW



#### Mounting Detail

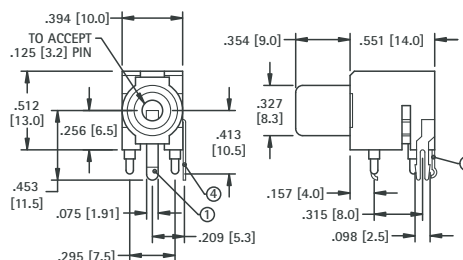


## COLOR KEYED - P.C. PHONO JACKS

- Mates with .125 (3.2) diameter pins
- Features a normally closed circuit
- Snap-fit mounting for positive retention during wave soldering
- Various colors for circuit identification



CAT. NO.	INSULATOR COLOR
970	WHITE
971	RED
972	BLACK
973	YELLOW



### SCHEMATIC



### SPECIFICATIONS

Housing: PBT

Ground Terminal: .020 (.51)  
Brass, Nickel Plate

Spring Contact: .012 (.30)  
Phosphor Bronze, Silver Plate

Shunt Terminal: .016 (.41)  
Brass, Silver Plate