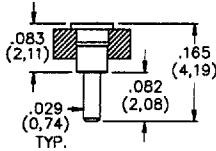


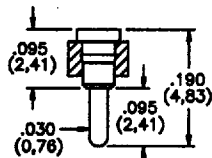
**LOWEST PROFILE OPTIONS**

**ULTRA LOW PROFILE OPTIONS**



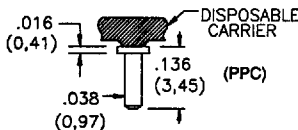
**Specify Contact/Shell**  
**156B** 30μ" Gold/200μ" Tin  
**PTH =** .035 ± .003

**VERY LOW PROFILE**

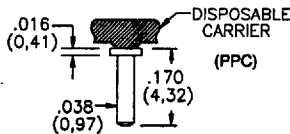


**Specify Contact/Shell**  
**157B** 200μ" Tin/200μ" Tin  
**160B** 30μ" Gold/200μ" Tin  
**PTH =** .036 ± .003

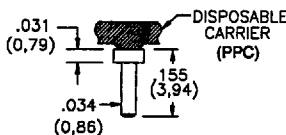
**FLUSH PROFILE**



**Specify Contact/Shell**  
**710C** 30μ" Gold/200μ" Tin  
**711C** 30μ" Gold/10μ" Gold  
**714C** 200μ" Tin-Lead/200μ" Tin-Lead  
**PTH =** .044 ± .003



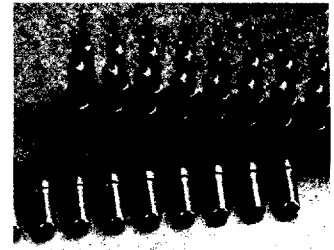
**Specify Contact/Shell**  
**720C** 30μ" Gold/200μ" Tin  
**721C** 30μ" Gold/10μ" Gold  
**PTH =** .044 ± .003



**Specify Contact/Shell**  
**725C** 30μ" Gold/200μ" Tin  
**726C** 30μ" Tin/200μ" Tin  
**PTH =** .040 ± .003

**Features**

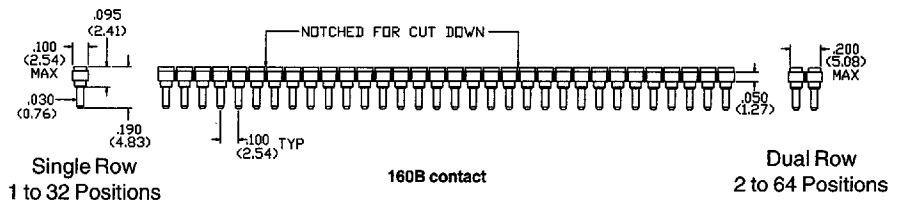
- Profiles as low as .016" (0,41) above PCB
- X and Y stackable
- Single and Dual Row available



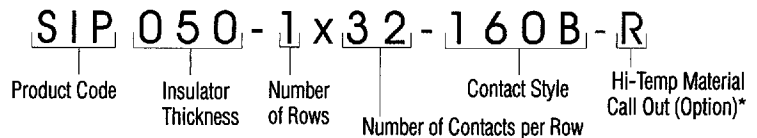
**STANDARD SOCKET BODY**

**GLASS REINFORCED THERMOPLASTIC, UL 94V-0**

Continuous use temperature 140°C

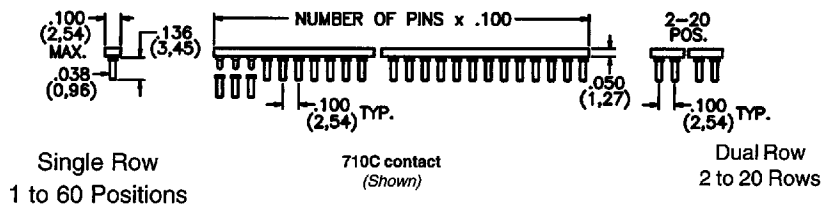


**How To Order**

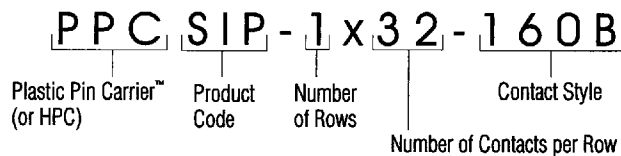


**PLASTIC PIN CARRIER (PPC™) SYSTEM**

Patent # 4,420,877



**How To Order**



See Section A for other contact/plating options

\*See page B1 for Material Call Outs

9011644 0000042 291

# Material Specifications



McKenzie Socket Division

INSULATORS	UL*	CONTINUOUS USE** TEMPERATURE	HEAT DEFLECTION** TEMPERATURE (@264 psi)
<b>Hi-Temp - Vapor Phase and IR Compatible</b>			
Polyimide Laminate (H), Glass Reinforced	94V-0	250°C	270°C
Fortron (PPS), (R), 40% Glass Reinforced	94V-0	220°C	260°C
Tefzel HT2004 (EPTFE),			
4% Glass Reinforced	94V-0		
8% Glass Reinforced	94V-0		
25% Glass Reinforced	94V-0	200°C	210°C
Vectra, C130 (LCP), (V)	94V-0	200°C	243°C
FR-4 Glass Epoxy (F)	94V-0	140°C	149°C
<b>Standard Temp-Wave Solder Compatible</b>			
Tefzel 280 (ETFE)	94V-0	150°C	74°C
Valox Polyester (420-SE0) (PBT)			
30% Fiberglass	94V-0	140°C	204°C
Zytel FR50, 25% Glass Reinforced Nylon	94V-0	130°C	240°C

\*UL Flammability rating

\*\* Typical value as defined by raw material supplier.

## OUTER SHELL AND TERMINAL MATERIALS – Screw Machine Sockets

Brass - Alloy 360, 1/2 hard, per QQ-B-626

Phosphor Bronze - Alloy 544 (B2), hard, per QQ-B-750, Comp. B

## INNER CONTACT MATERIALS – Screw Machine Sockets

Beryllium Copper (BeCu) - Alloy 172, heat treated, per QQ-C-533

Beryllium Nickel (BeNi) - Alloy 440, heat treated

## OUTER SHELL AND TERMINAL PLATINGS – Screw Machine Sockets

200µ" (nominal) BRIGHT ACID TIN per MIL-T-10727, Type 1 over 100µ" (nominal) Nickel per QQ-N-290

10µ" (nominal) GOLD per MIL-G-45204, Type 1 GRADE C, over 100µ" (nominal) Nickel per QQ-N-290

50µ" (nominal) GOLD per MIL-G-45204, Type 1 GRADE C, over 100µ" (nominal) Nickel per QQ-N-290

200µ" (nominal) TIN/LEAD (93%/7%) per MIL-P-81728, Type 1 over 100µ" (nominal) Nickel per QQ-N-290

## INNER CONTACT PLATINGS – Screw Machine Sockets

10µ" (nominal) GOLD per MIL-G-45204, Type 1, GRADE C, over 50µ" (nominal) Nickel per QQ-N-290

30µ" (nominal) GOLD per MIL-G-45204, Type 1, GRADE C, over 50µ" (nominal) Nickel per QQ-N-290

50µ" (nominal) GOLD per MIL-G-45204, Type 1, GRADE C, over 50µ" (nominal) Nickel per QQ-N-290

All McKenzie  
Molded Insulators



9011644 0000128 8T2

**PERFORMANCE CHARACTERISTICS\* — Screw Machine Sockets**

Parameter	Value
Contact Resistance	<10 milliohms per contact
Contact Capacitance	0.3 pF
Contact Current Rating (for 10°C temperature rise)	3 A except for #6 (10) which is 2 A
Insulation Resistance (@ 500 V DC)	10,000 megaohms (min)
Contact Operating Temperature Range	-55°C to +150°C (BeCu) -55°C to +225°C (BeNi)
Dielectric Withstanding Voltage	1000 VAC
Rated Voltage	100 V AC
Durability	1000 cycles (min) @ 10 milliohms maximum change
Inner Contact Retention in Shell	7.5 lbs (3360 grams) minimum
Shell Retention force in Insulator (PGA's/DIP's)	10lbs (4480 grams) minimum

**TEST CONDITIONS**

Test	Results
Thermal Shock (IEC-68-2-14)	<2 milliohms change in contact resistance after 4 cycles (-10°C to +85°C)
Vibration (MIL-S-83505)	No electrical discontinuities or mechanical damage (10-2000Hz, 20G's, 1hr)
Solderability	Conforms to MIL-STD-202, Method 208
Shock (MIL-STD-202)	No discontinuities or mechanical damage (10 cycles of 200G's)
Temperature/Humidity Cycling (MIL-STD-1344)	<2 milliohms increase in contact resistance after 21 days, 40°C, 93% RH
Salt Spray (MIL-7344A)	<2 milliohms increase in contact resistance after 48 hrs, 35°C, 5% NaCl

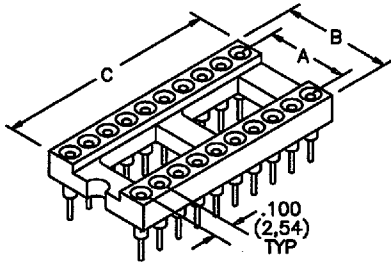
\*Unless otherwise stated

**SPECIFICATIONS**

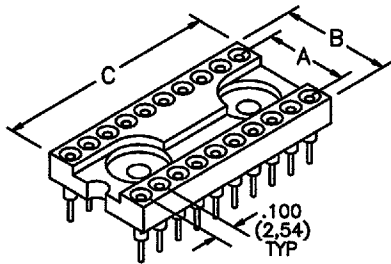
When applicable, McKenzie Technology's products and procedures are designed to meet the following general specifications:

MIL-STD 105	Sampling procedures
MIL-STD 109	Quality assurance terms and definitions
MIL-STD 202	Test methods for electronic and electrical components part
MIL-STD 1130	Connections, electrical, solderless, wrapped
MIL-STD 1344	Test methods for electrical connectors
MIL-STD 45662	Calibration system requirements
MIL-I-45208A	Inspection system requirements
MIL-C-39029	General specification for contacts, electrical connectors
MIL-S-83505	General specification for sockets (lead, electronic components)
ASTM-B487-79	Measuring metal oxide coating thickness by microscopical examination of a cross section
ASTM-B567	Standard method of test for coating thickness by the Beta Backscatter principle
ASTM-A754-79	Standard method of test for coating thickness by X-ray fluorescence
MIL-M-24519	Molding plastics, electrical, thermoplastic
MIL-S-83734	Sockets, plug in electronic components, DIP, SIP, general specification for
MIL-P-13949	Plastic sheet, laminated, metal clad, general specification for

### Insulator Options



**OPEN FRAME**



**CLOSED FRAME**

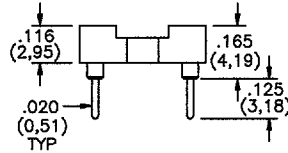
Insulators are  
UL 94V-0 Rated  
Thermoplastic



AVAILABLE

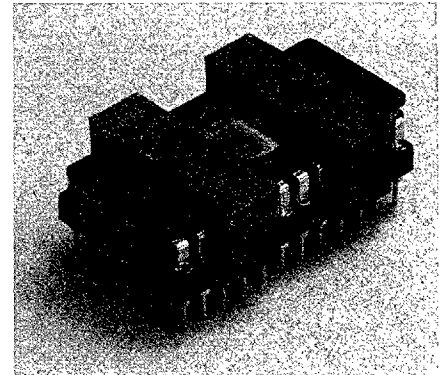
See page B1 for Hi-Temp Options

### OUR MOST POPULAR CONTACT



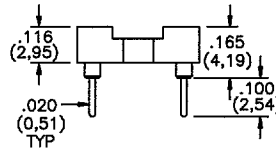
Specify	Contact/Shell
001B	30μ" Gold/200μ" Tin
002B	30μ" Gold/10μ" Gold
011B	10μ" Gold/200μ" Tin
014B	200μ" Tin/200μ" Tin
016B*	30μ" Gold/200μ" Tin
PTH =	.026 ± .003

\*CLINCHABLE SOFT BRASS

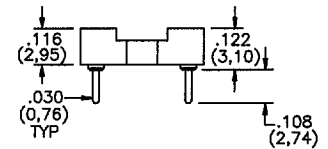


IC Retention DIP Clamps See Page B19

### SHORTER SOLDER TAIL — NO TRIMMING

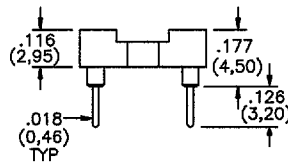


Specify	Contact/Shell
018B	200μ" Tin/200μ" Tin
PTH =	.026 ± .003

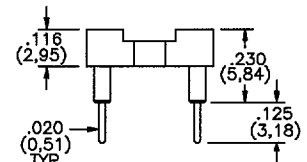


Specify	Contact/Shell
185B	30μ" Gold/200μ" Tin
PTH =	.036 ± .003

### HIGHER PCB STANDOFF



Specify	Contact/Shell
248B	30μ" Gold/10μ" Gold
PTH =	.024 ± .003



Specify	Contact/Shell
040B	30μ" Gold/10μ" Gold
041B	30μ" Gold/200μ" Tin
PTH =	.026 ± .003

**Contact/Shell:**

Inner Contact — Beryllium Copper  
Outer Shell — 1/2 Hard Brass

**Plating:**

Outer Shell — Gold over 100μ" Nickel or Tin over 100μ" Nickel  
Inner Contact — Gold over 50μ" Nickel or Tin over 100μ" Nickel

Other contact and plating styles available, see Section A or consult the factory