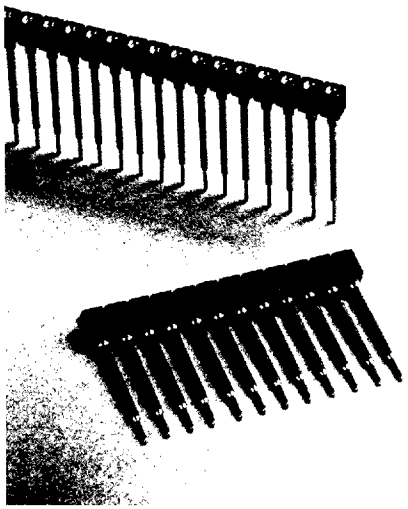


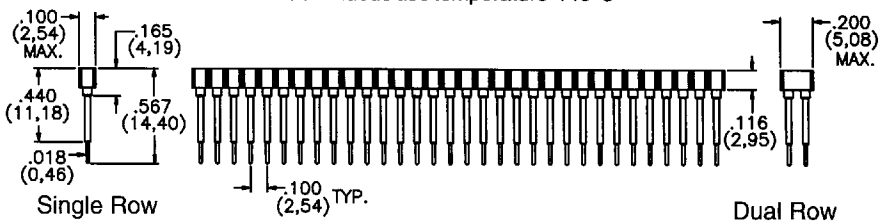
Elevated SIP Socket

Features

- Elevated Sockets allow for greater package density
- Allows stacking of PCB
- Maximizes airfow
- Available in Hi-Temp PPS Insulator material

STANDARD TEMPERATURE — UL 94V-0 THERMOPLASTIC

Continuous use temperature 140°C

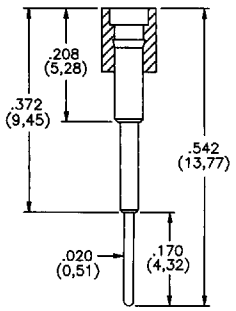


Single Row
1 to 32 Positions

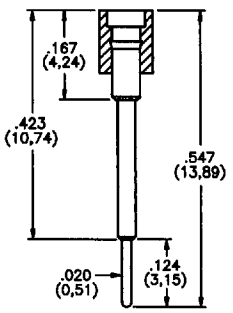
Dual Row
2 to 64 Positions

300B contact

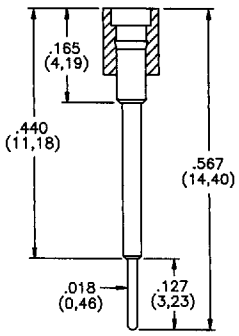
Popular Elevated SIP Sockets



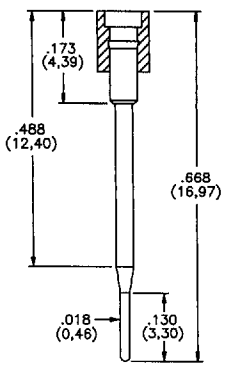
Specify	Contact/Shell
302B	30µ" Gold/200µ" Tin
PTH =	.026 ± .003



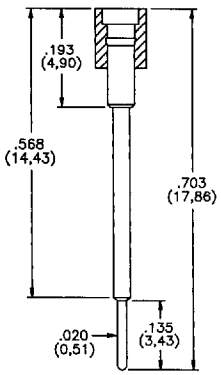
Specify	Contact/Shell
310B	30µ" Gold/10µ" Gold
PTH =	.026 ± .003



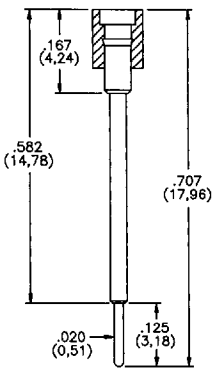
Specify	Contact/Shell
300B	30µ" Gold/200µ" Tin
PTH =	.024 ± .003



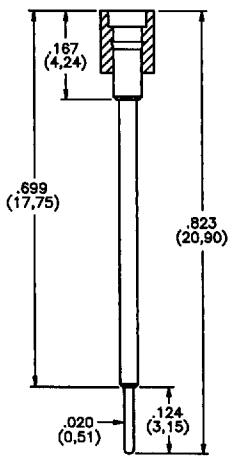
Specify	Contact/Shell
314B	30µ" Gold/10µ" Gold
PTH =	.024 ± .003



Specify	Contact/Shell
301B	30µ" Gold/200µ" Tin
PTH =	.026 ± .003



Specify	Contact/Shell
312B	30µ" Gold/10µ" Gold
PTH =	.026 ± .003



Specify	Contact/Shell
313B	30µ" Gold/10µ" Gold
PTH =	.026 ± .003

How To Order

SIP 1 x 32 - 300B - R

Product Code | Number of Rows | Number of Contacts per Row | Contact Style | Hi-Temp Material Call Out (Option)*

HIGH TEMP
AVAILABLE

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

Plating:
Outer Shell — Gold over 100µ Nickel or Tin over 100µ Nickel
Inner Contact — Gold over Nickel or Tin over Nickel

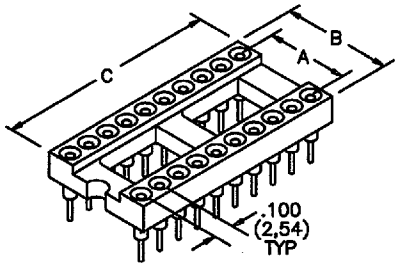
Other contact and plating styles available, See Section A or consult the factory.

See page B1 for Material Call Outs

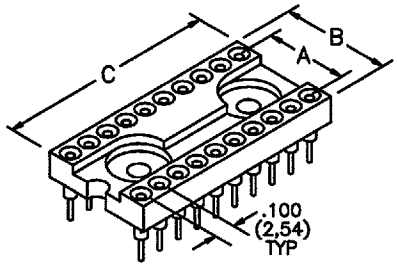
BERG ELECTRONICS

MK McKenzie Socket Division

Insulator Options



OPEN FRAME



CLOSED FRAME

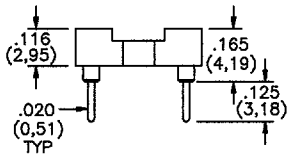
Insulators are
UL 94V-0 Rated
Thermoplastic

HIGH TEMP

AVAILABLE

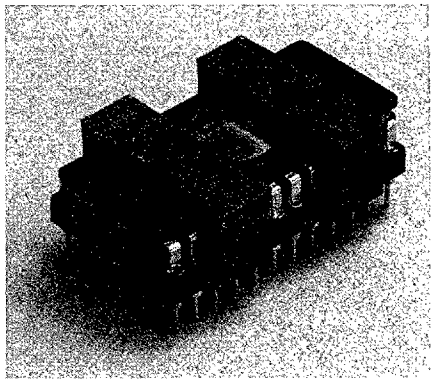
See page B1 for Hi-Temp Options

OUR MOST POPULAR CONTACT



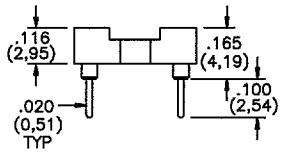
Specify	Contact/Shell
001B	30µ" Gold/200µ" Tin
002B	30µ" Gold/10µ" Gold
011B	10µ" Gold/200µ" Tin
014B	200µ" Tin/200µ" Tin
016B*	30µ" Gold/200µ" Tin
PTH =	.026 ± .003

**CLINCHABLE SOFT BRASS*

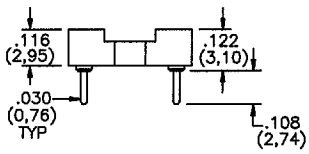


IC Retention DIP Clamps See Page B19

SHORTER SOLDER TAIL — NO TRIMMING

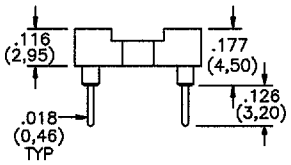


Specify	Contact/Shell
018B	200µ" Tin/200µ" Tin
PTH =	.026 ± .003

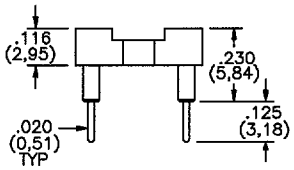


Specify	Contact/Shell
185B	30µ" Gold/200µ" Tin
PTH =	.036 ± .003

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

INSULATORS	UL*	CONTINUOUS USE** TEMPERATURE	HEAT DEFLECTION** TEMPERATURE (@264 psi)
Hi-Temp - Vapor Phase and IR Compatible			
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
Standard Temp-Wave Solder Compatible			
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

®
Recognized

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% NaCi

**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 florescence
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