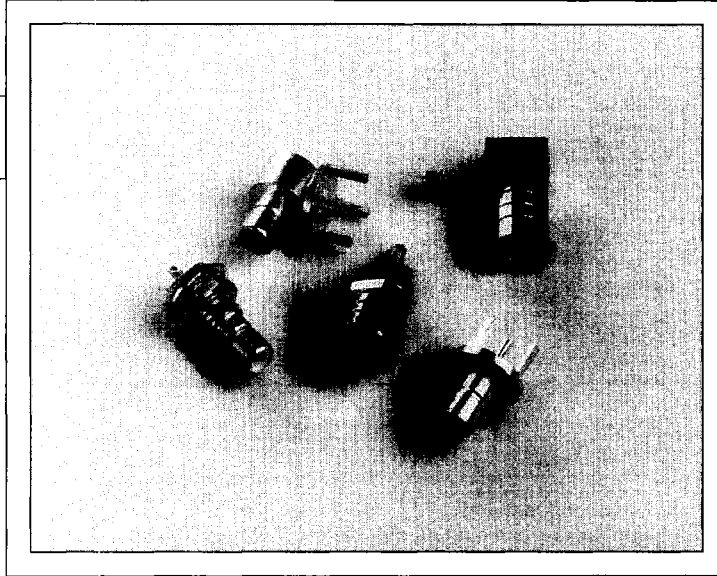


Subminiature Connectors



SMB connectors are an excellent solution for space-limited applications to 4 GHz and feature a rapid connect/disconnect engagement. This product line features straight and right angle configurations in all popular cable groups as well as in printed circuit board mounting.

Contents:

- Specifications
- Interface Drawings
- Solder/Clamp, Clamp
- Crimp/Clamp
- Crimp
- Printed Circuit Mount
- Solder Pot, Adapters
- Mounting Hole Dimensions

SMB 09 SERIES

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

MECHANICAL

MATERIALS

Bodies and Male Contacts: Brass per ASTM B 16.
Insulation: Teflon (PTFE) per ASTM D 1457.
Female Contacts: Beryllium Copper per ASTM B 196.

PLATING

Gold per MIL-C-45204.
Copper per MIL-C-14550.
Nickel per QQ-N-290.

FINISH* (Add letter to end of part number.)

"C": Body - .000020 Gold over .0001 Copper.
Contact - .000030 Gold over .000050 Nickel.
"N": Body - .000200 Nickel.
Contact - .000030 Gold over .000050 Nickel.
"H": Body - .000020 Gold over .0001 Copper.
Contact - .000050 Gold over .0001 Copper.
Non-Magnetic - Residual Magnetism less than 20 Gamma.

MATING CHARACTERISTICS

Center Contact Pin and Socket per MIL-C-39012.
Center Contact Engagement/Disengagement Forces:
Female Contact Insertion Force: 2.5 lbs Max.
Withdrawal Force: 1 oz. Min. per MIL-C-39012.
Engagement: Initial 14 lbs. Max., after 500 Cycles, 2 lbs. Min.
Durability: 500 Cycles.

ELECTRICAL

Impedance: 50 Ohms.
Frequency Range: 0-4 GHz.
Voltage Rating: 335 V RMS.
Insulation Resistance: 1,000 Megohms.
Temperature Rating: -85° F to +329° F
(-65° C to +165° C).

DWV:

RG178 Cable or Equivalent 750 V RMS.
RG316 Cable or Equivalent 1,000 V RMS.

RF High Potential:

Straight Connector, Solder Pot, 600 V RMS.
RG178 Cable or Equivalent 500 V RMS.
RG316 Cable or Equivalent 700 V RMS.

Contact Resistance:

Straight Connector 6.0 Milliohms.
Right Angle Connector 12.0 Milliohms.

VSWR:

Straight Connector RG178 Cable or Equivalent $1.30 + .04f(\text{GHz})$.
Straight Connector RG316 Cable or Equivalent $1.25 + .04f(\text{GHz})$.
Right Angle Connector RG176 Cable or Equivalent $1.45 + .06f(\text{GHz})$.
Right Angle Connector RG316 Cable or Equivalent $1.35 + .04f(\text{GHz})$.

Corona Level:

RG178 Cable or Equivalent 185 Volts Min.
RG316 Cable or Equivalent 250 Volts Min.

RF Leakage: -55 dB Min. at 2-3 GHz.

Insertion Loss:

Straight Cable Connector .30 dB Max. at 1.5 GHz.
Right Angle Cable Connector .60 dB Max. at 1.5 GHz.

ENVIRONMENTAL

Vibration, High Frequency: MIL-STD-202, Method 204, Condition B.
Shock: MIL-STD-202, Method 213, Condition B.
Thermal Shock: MIL-STD-202, Method 107, Test Condition B at +185° F (+85° C).
Corrosion: MIL-STD-202, Method 101, Test Condition B, 5% Salt Solution.

* All other components plated to meet environmental requirements.



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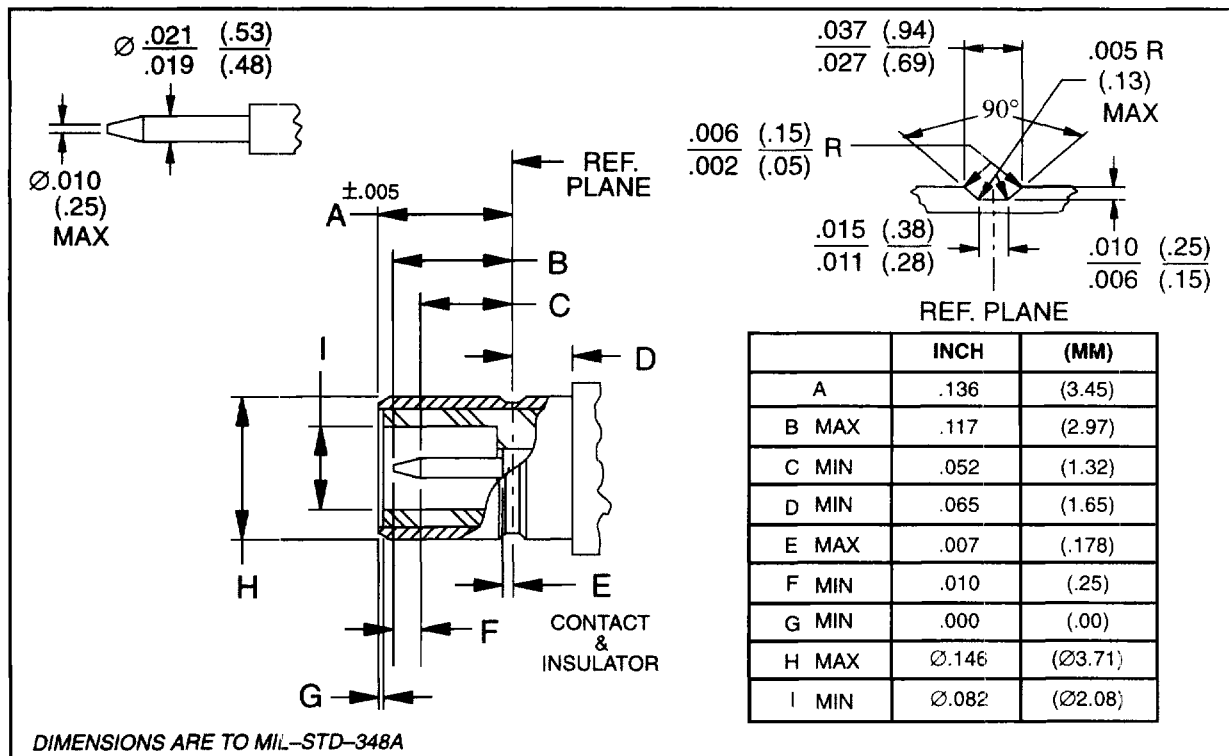
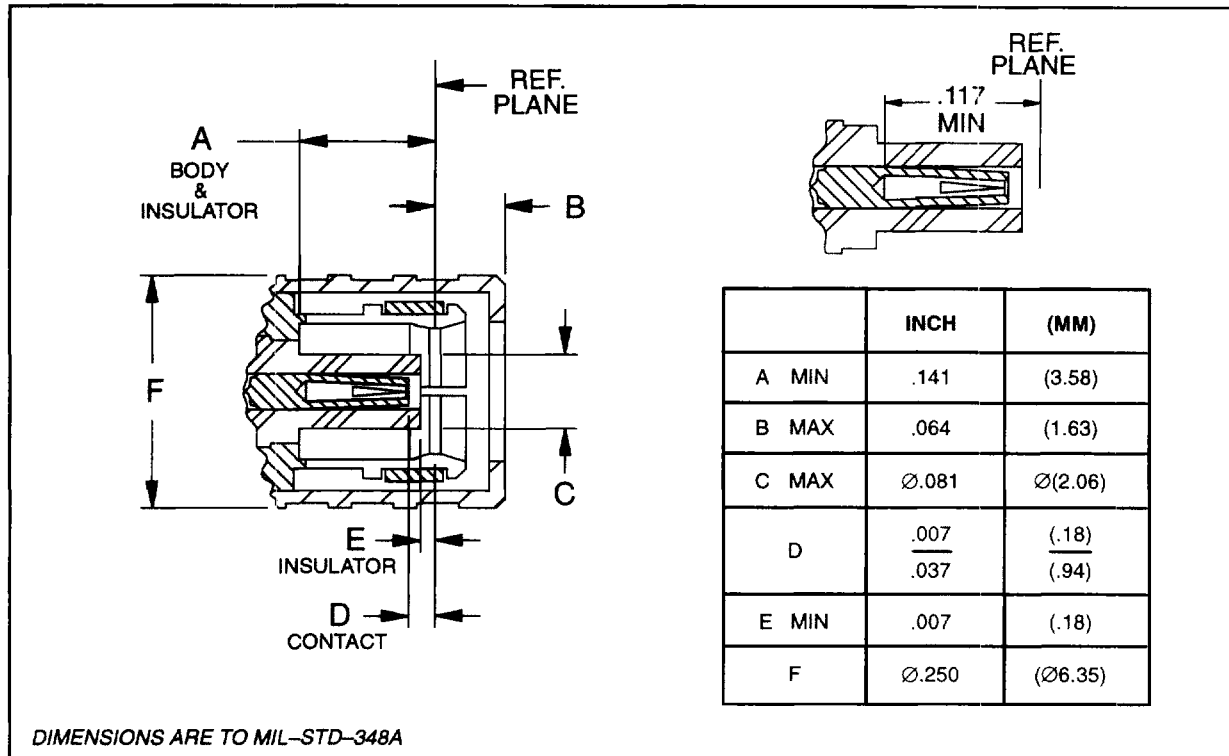
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SMB 09 SERIES

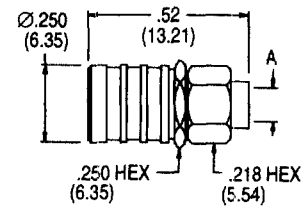
INTERFACE DRAWINGS



SMB 09 SERIES SOLDER/CLAMP, CLAMP

Part Number	A DIA.	Cable
09-0300-0860*	.089 (2.26)	RG405-M17/133 (.086 S.R.)

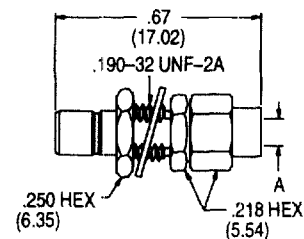
Straight Plug



Solder/Clamp

Part Number	A DIA.	Cable
09-1380-0860*	.089 (2.26)	RG405-M17/133 (.086 S.R.)

Straight Jack, Bulkhead

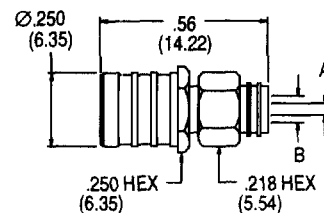


Solder/Clamp

See Mounting Data Page, FIG. 2

Part Number	A DIA.	B DIA.	Cable
09-0500-0400*	.040 (1.02)	.081 (2.06)	RG178,196,404
09-0500-0670*	.067 (1.70)	.111 (2.82)	RG188,316,187,174,179
09-0500-2670*	.067 (1.70)	.128 (3.25)	RG316 D.S. (M17/152)

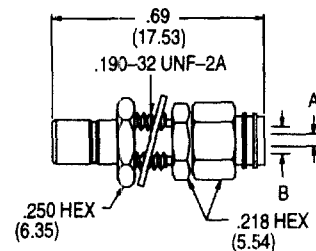
Straight Plug



Clamp

Part Number	A DIA.	B DIA.	Cable
09-1580-0400*	.040 (1.02)	.081 (2.06)	RG178,196,404
09-1580-0670*	.067 (1.70)	.111 (2.82)	RG188,316,187,174,179
09-1580-2670*	.067 (1.70)	.128 (3.25)	RG316 D.S. (M17/152)

Straight Jack, Bulkhead



Clamp

See Mounting Data Page, FIG. 2

*See Specification Page for finish suffix.



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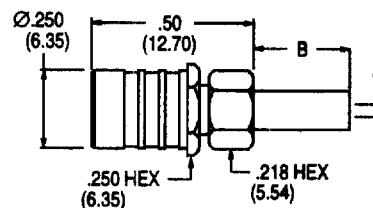
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SMB 09 SERIES CRIMP/CLAMP

Part Number	A DIA.	B	Cable
09-0800-0400*	.040 (1.02)	.31 (7.87)	RG178,196,404
09-0800-0670*	.067 (1.70)	.38 (9.65)	RG188,316,187,174,179
09-0800-2670*	.067 (1.70)	.38 (9.65)	RG316 D.S. (M17/152)

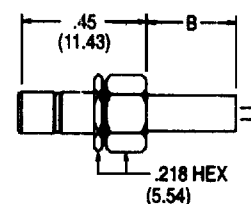
Straight Plug



Crimp/Clamp

Part Number	A DIA.	B	Cable
09-1800-0400*	.040 (1.02)	.31 (7.87)	RG178,196,404
09-1800-0670*	.067 (1.70)	.38 (9.65)	RG188,316,187,174,179
09-1800-2670*	.067 (1.70)	.38 (9.65)	RG316 D.S. (M17/152)

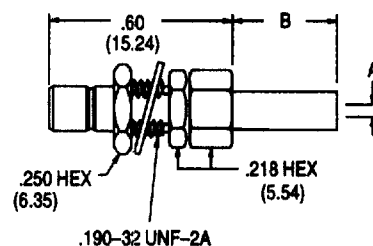
Straight Jack



Crimp/Clamp

Part Number	A DIA.	B	Cable
09-1880-0400*	.040 (1.02)	.31 (7.87)	RG178,196,404
09-1880-0670*	.067 (1.70)	.38 (9.65)	RG188,316,187,174,179
09-1880-2670*	.067 (1.70)	.38 (9.65)	RG316 D.S. (M17/152)

Straight Jack, Bulkhead



Crimp/Clamp

See Mounting Data Page, FIG. 2

*See Specification Page for finish suffix.



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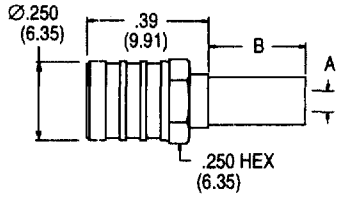
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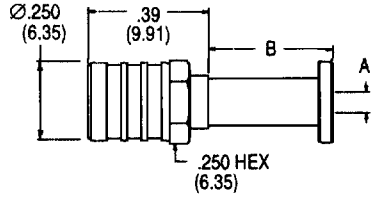
PALCO CONNECTOR

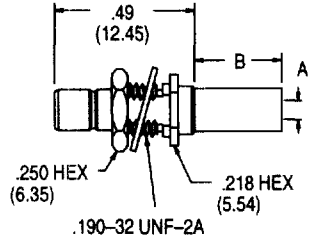
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SMB 09 SERIES CRIMP

Part Number	A DIA.	B	Cable	Straight Plug
09-0800-0673*	.067 (1.70)	.30 (7.62)	RG188,316,174,179	
				Crimp

Part Number	A DIA.	B	Cable	Straight Plug
09-0800-0677*	.067 (1.70)	.400 (10.16)	RG188,316,174,179	
				Crimp

Part Number	A DIA.	B	Cable	Straight Jack, Bulkhead
09-1880-0673*	.067 (1.70)	.31 (7.87)	RG188,316,174,179	
				Crimp See Mounting Data Page, FIG. 2

Part Number	A DIA.	B	Cable
09-2800-0400*	.040 (1.02)	.31 (7.87)	RG178,196,404
09-2800-0670*	.067 (1.70)	.38 (9.65)	RG188,316,187,174,179
09-2800-2670*	.067 (1.70)	.38 (9.65)	RG316 D.S. (M17/152)

Right Angle Plug

Crimp

*See Specification Page for finish suffix.



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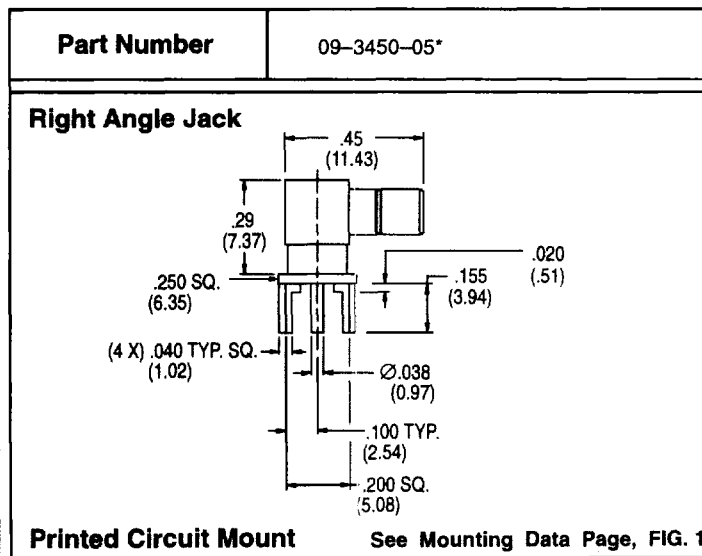
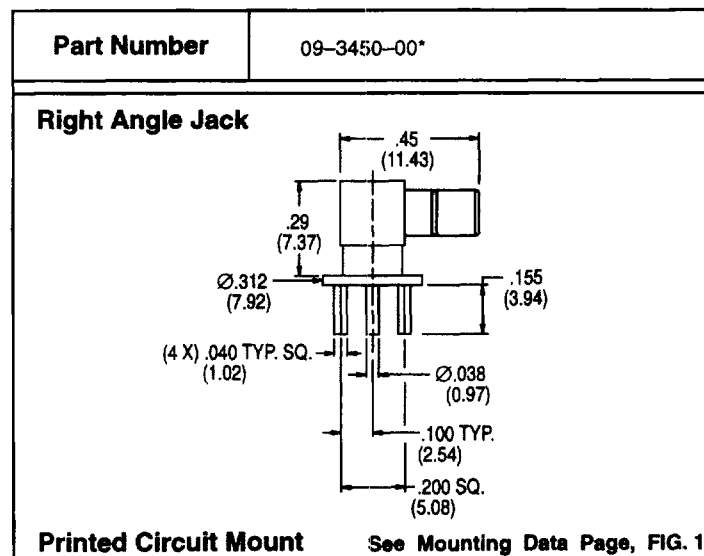
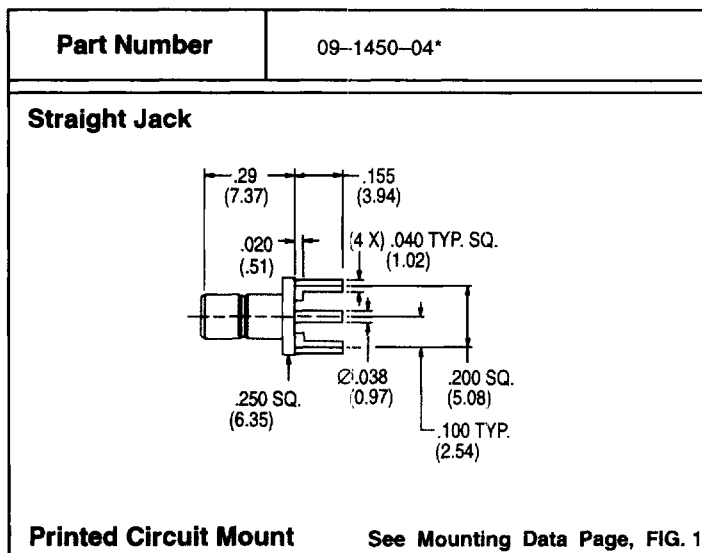
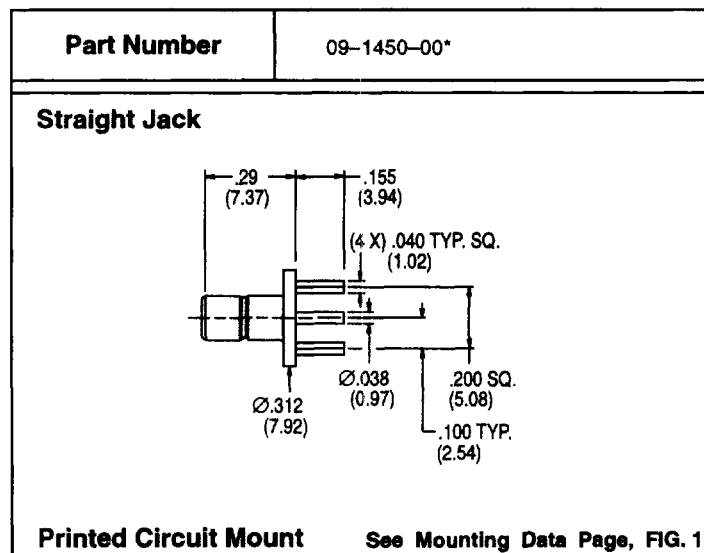
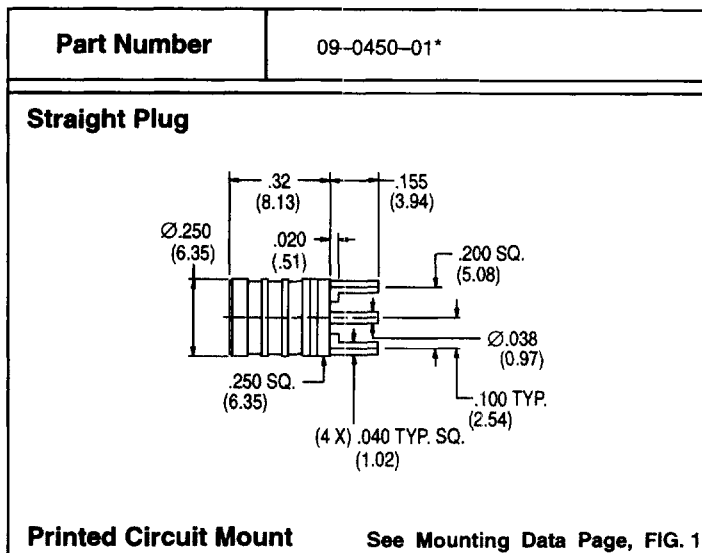
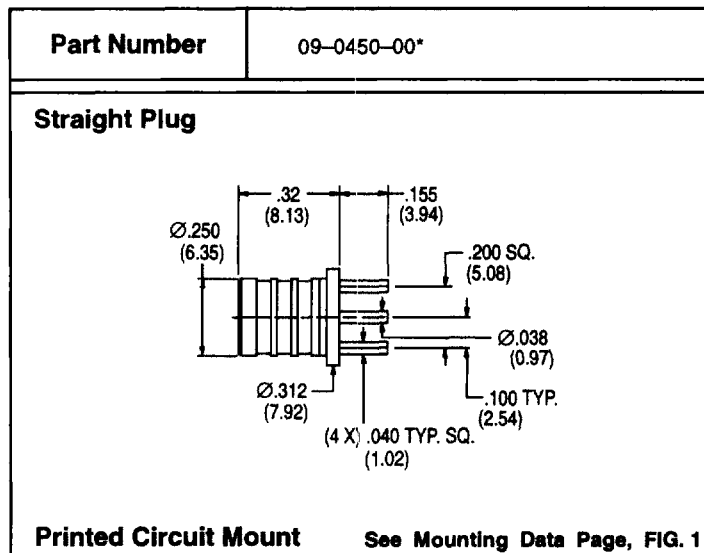
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SMB 09 SERIES PRINTED CIRCUIT MOUNT



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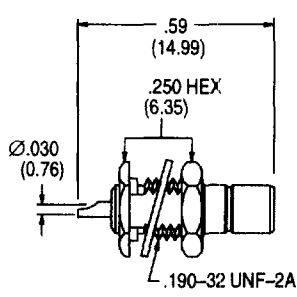
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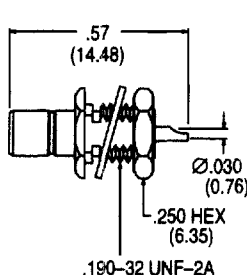
PALCO CONNECTOR

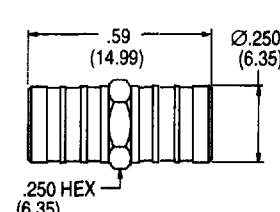
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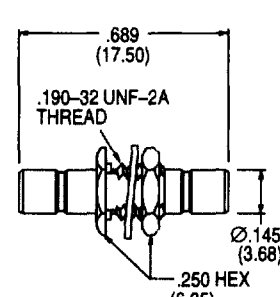
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SMB 09 SERIES SOLDER POT, ADAPTERS

Part Number	09-1080-00*
Jack 	
Rear Panel Mount	See Mounting Data Page, FIG. 2

Part Number	09-1080-01*
Jack 	
Front Panel Mount	See Mounting Data Page, FIG. 2

Part Number	0909-0000-00*
Plug/Plug 	
Adapter	

Part Number	0909-1180-00*
Jack/Jack 	
Adapter, Bulkhead Mount	See Mounting Data Page, FIG. 2

*See Specification Page for finish suffix.



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MOUNTING HOLE DIMENSIONS

FIGURE 1

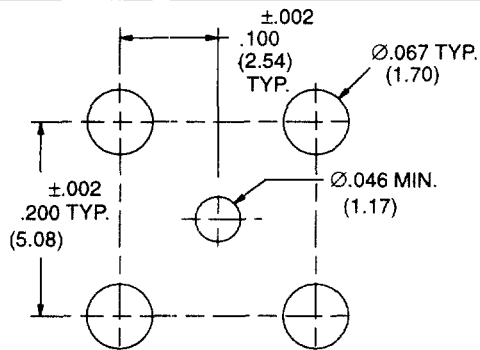
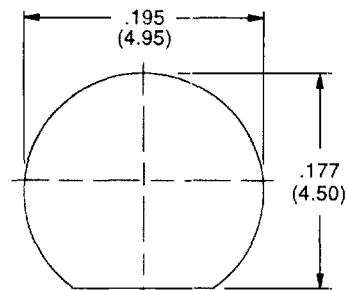


FIGURE 2



NOTE: .125 (3.2) MAX PANEL THICKNESS

FIGURE 3

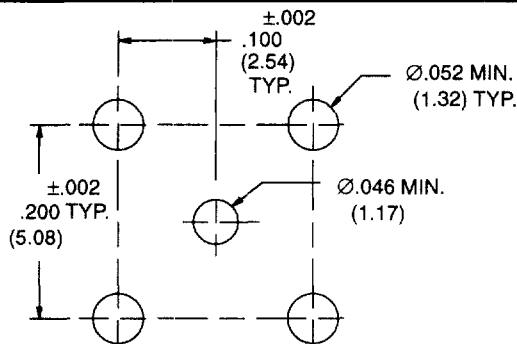


FIGURE 4

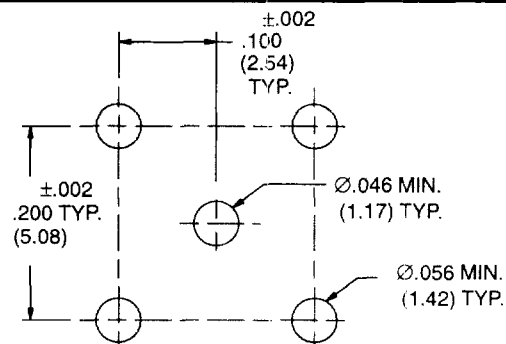


FIGURE 5

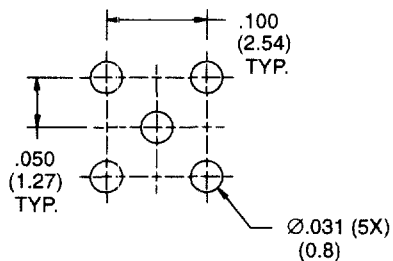


FIGURE 6

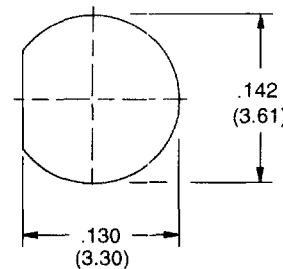


FIGURE 7

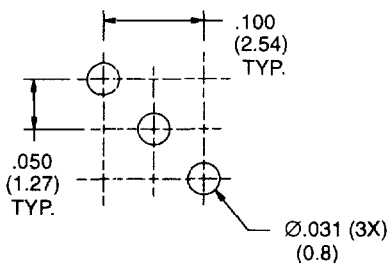
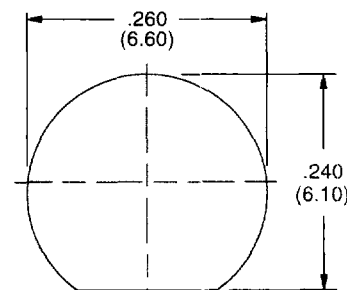


FIGURE 8



NOTE: .125 (3.2) MAX PANEL THICKNESS

