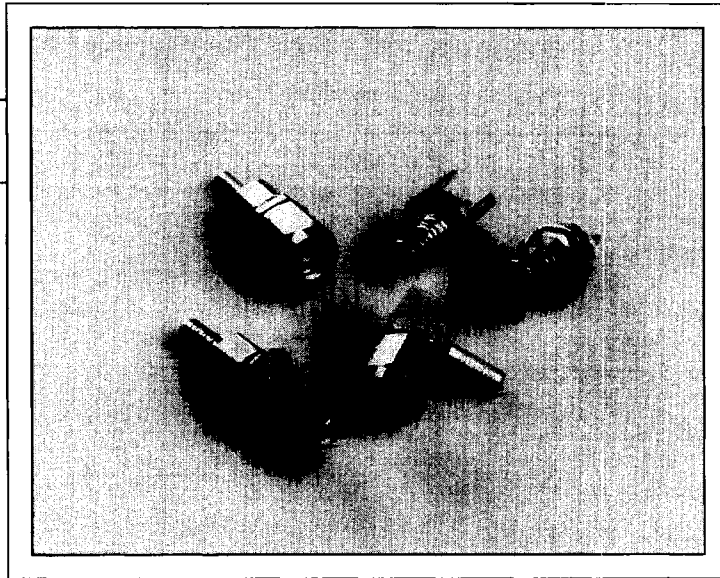


Subminiature Connectors



For applications requiring miniaturization and improved electrical performance, the SMC features a threaded coupling and a positive engagement for environments experiencing high vibration. Ideal for space limited applications, the SMC operates from DC to 10 GHz. Available in straight and right angle configurations, as well as panel mount and printed circuit board mount designs for popular cable groups.

Contents:

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

SMC 10 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-G-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.
Mating Torque: 16 In.-oz. Max.
Coupling Proof Torque: 100 In.-oz. Min.
Coupling Nut Retention: 35 lbs. Min.
Durability: 500 Cycles.

ELECTRICAL

Impedance: 50 Ohms.
Frequency Range: 0-10 GHz.
Voltage Rating: 335 V RMS.
Insulation Resistance: 1,000 Megohms.
Temperature Rating: -85° F to +329° F
(-65° C to +165° C).

DWV:

RG 178 Cable or Equivalent 750 V RMS.
RG 316 Cable or Equivalent 1,000 V RMS.

RF High Potential:

Straight Connector, Solder Pot, 600 V RMS.
RG 178 Cable or Equivalent 500 V RMS.
RG 316 Cable or Equivalent 700 V RMS.

Contact Resistance:

Straight Connector 6.0 Milliohms.
Right Angle Connector 12.0 Milliohms.

VSWR:

Straight Connector RG 178 Cable or Equivalent 1.25 + .04f(GHz).
Straight Connector RG 316 Cable or Equivalent 1.20 + .04f(GHz).
Right Angle Connector RG 176 Cable or Equivalent 1.40 + .06f(GHz).
Right Angle Connector RG 316 Cable or Equivalent 1.30 + .04f(GHz).

Corona Level:

RG 178 Cable or Equivalent 185 Volts Min.
RG 316 Cable or Equivalent 250 Volts Min.

RF Leakage:

-60 dB Min. at 2-3 GHz.

Insertion Loss:

Straight Cable Connector .25 dB Max. at 4 GHz.
Right Angle Cable Connector .50 dB Max. at 4 GHz.

ENVIRONMENTAL

Vibration, High Frequency: MIL-STD-202, Method 204, Condition D.
Shock: MIL-STD-202, Method 213, Condition C.
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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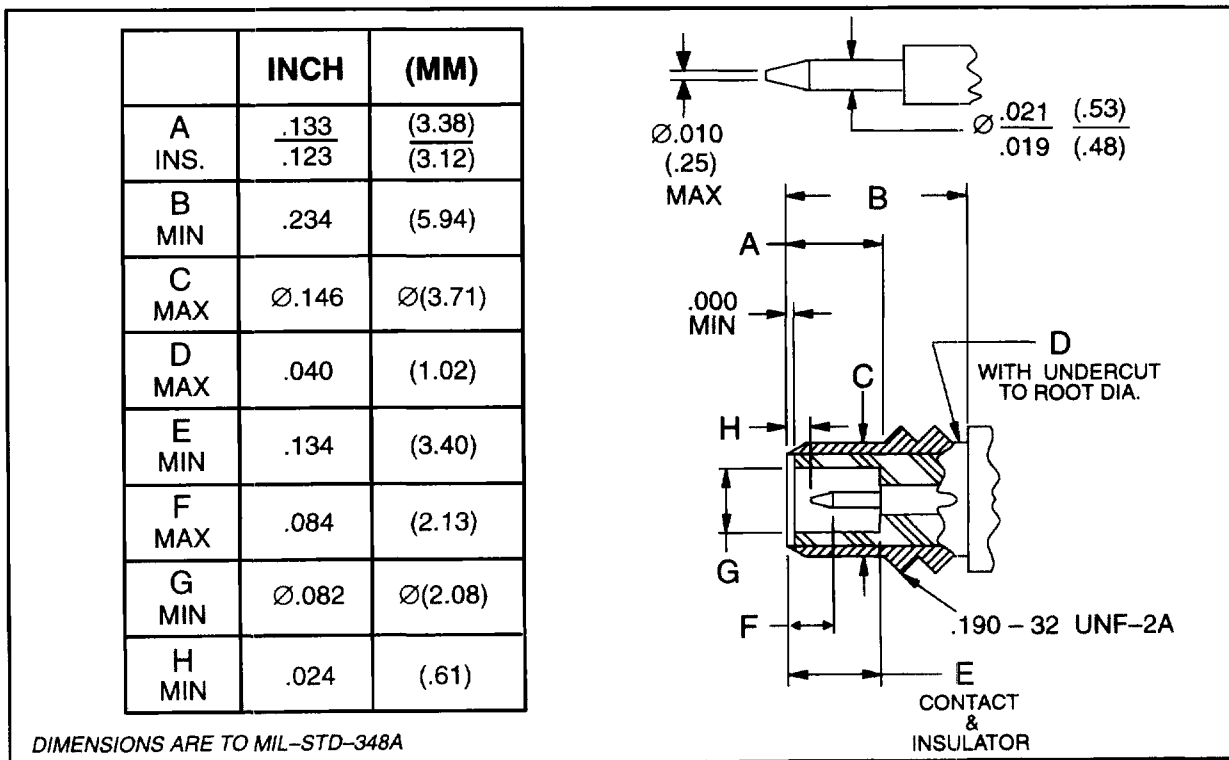
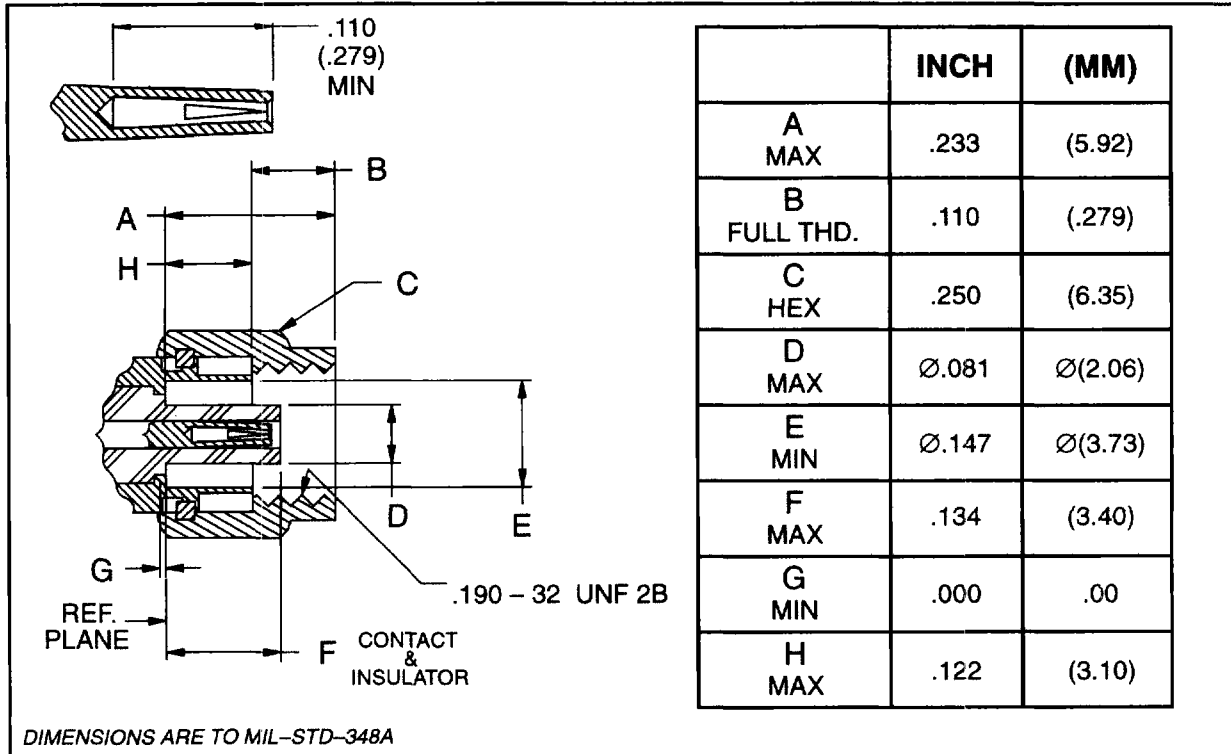
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SMC 10 SERIES

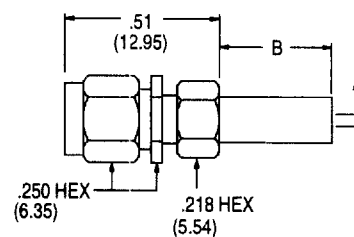
INTERFACE DRAWINGS



SMC 10 SERIES CRIMP/CLAMP, CRIMP

Part Number	A DIA.	B	Cable
10-0800-0400*	.040 (1.02)	.31 (7.87)	RG178,196,404
10-0800-0670*	.067 (1.70)	.38 (9.65)	RG188,316,187,174,179
10-0800-2670*	.067 (1.70)	.38 (9.65)	RG316 D.S. (M17/152)

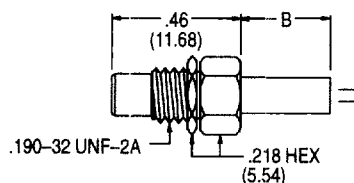
Straight Plug



Crimp/Clamp

Part Number	A DIA.	B	Cable
10-1800-0400*	.040 (1.02)	.31 (7.87)	RG178,196,404
10-1800-0670*	.067 (1.70)	.38 (9.65)	RG188,316,187,174,179
10-1800-2670*	.067 (1.70)	.38 (9.65)	RG316 D.S. (M17/152)

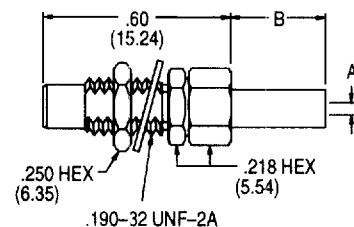
Straight Jack



Crimp/Clamp

Part Number	A DIA.	B	Cable
10-1880-0400*	.040 (1.02)	.31 (7.87)	RG178,196,404
10-1880-0670*	.067 (1.70)	.38 (9.65)	RG188,316,187,174,179
10-1880-2670*	.067 (1.70)	.38 (9.65)	RG316 D.S. (M17/152)

Straight Jack, Bulkhead

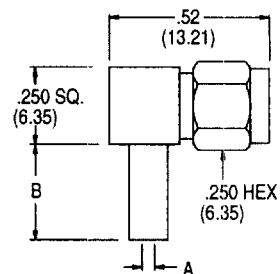


Crimp/Clamp

See Mounting Data Page, FIG. 2

Part Number	A DIA.	B	Cable
10-2800-0400*	.040 (1.02)	.081 (2.06)	RG178,196,404
10-2800-0670*	.067 (1.70)	.111 (2.82)	RG188,316,187,174,179
10-2800-2670*	.067 (1.70)	.128 (3.25)	RG316 D.S. (M17/152)

Right Angle Plug



Crimp

*See Specification Page for finish suffix.



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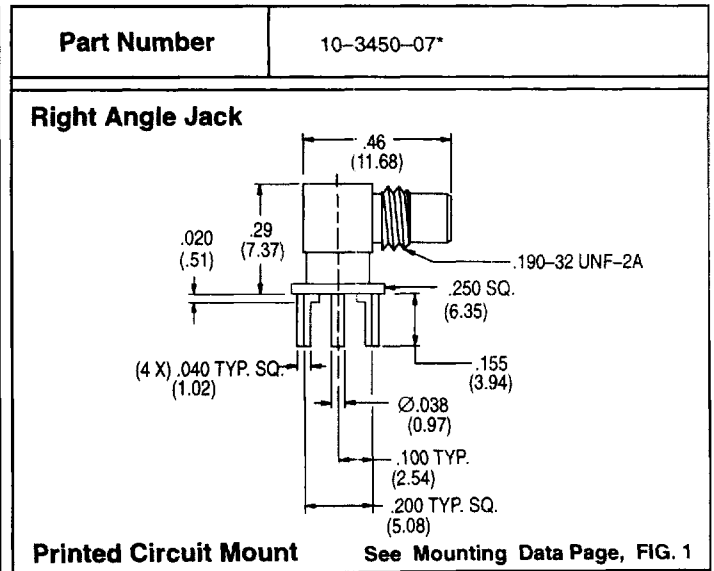
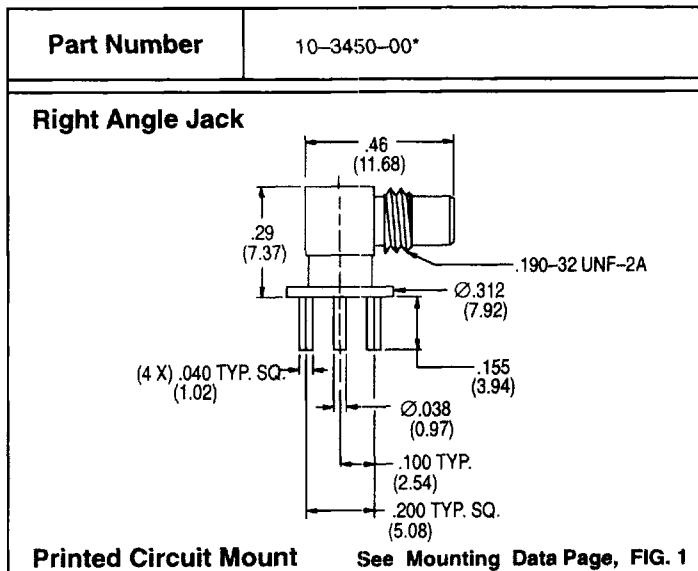
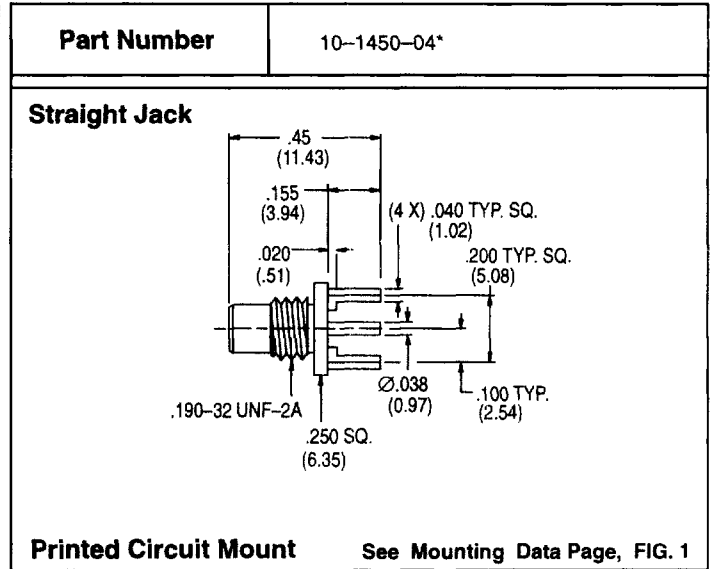
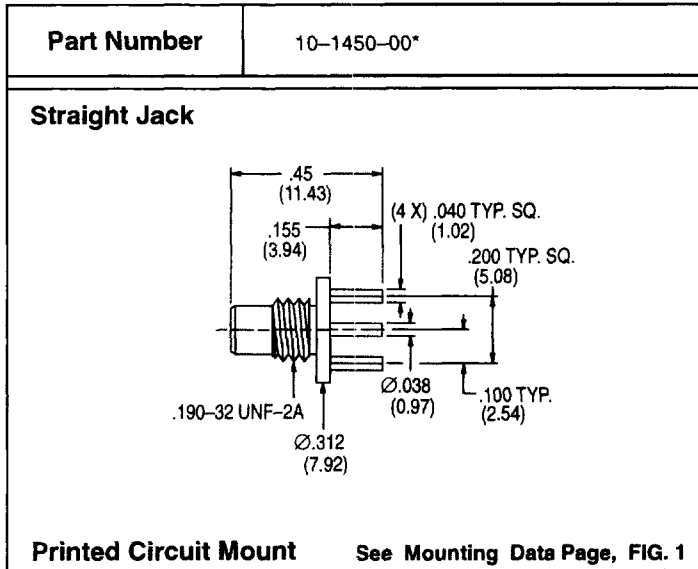
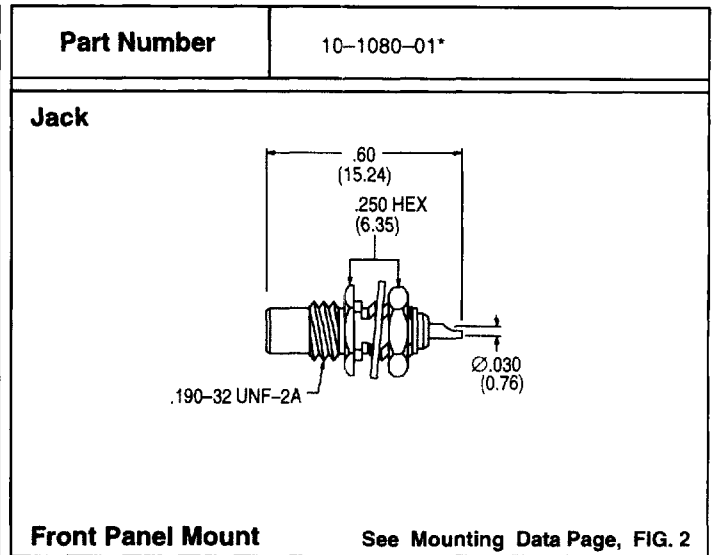
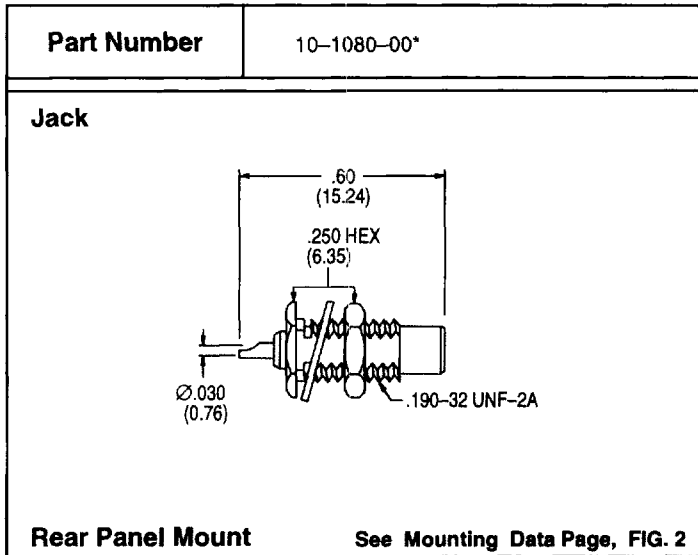
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SMC 10 SERIES SOLDER POT, PRINTED CIRCUIT MOUNT



*See Specification Page for finish suffix.



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MOUNTING HOLE DIMENSIONS

FIGURE 1

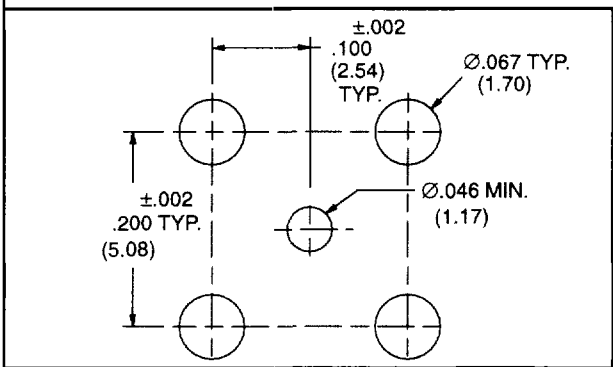


FIGURE 2

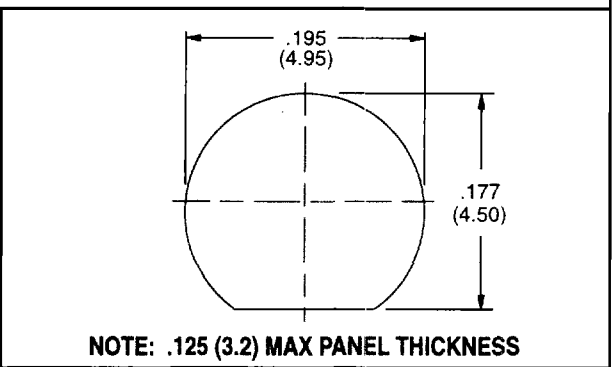


FIGURE 3

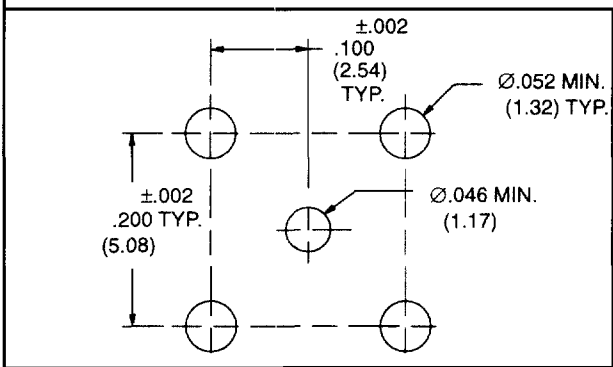


FIGURE 4

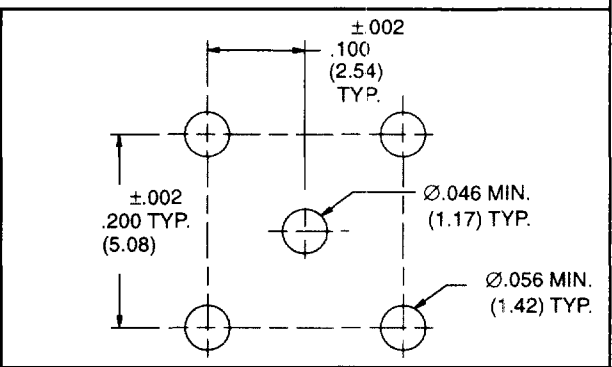


FIGURE 5

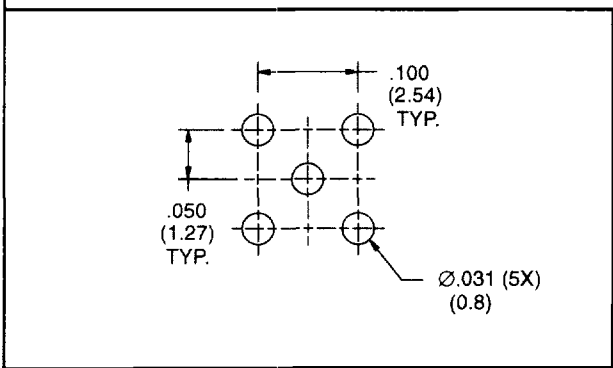


FIGURE 6

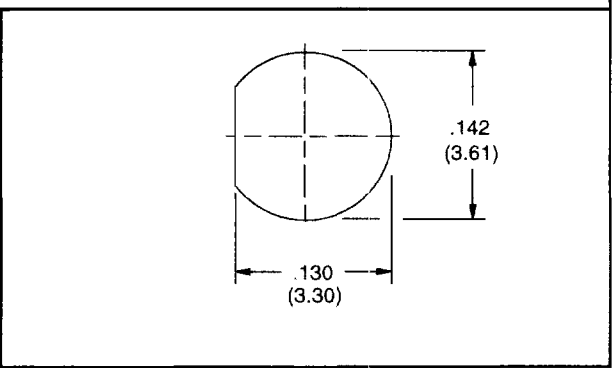


FIGURE 7

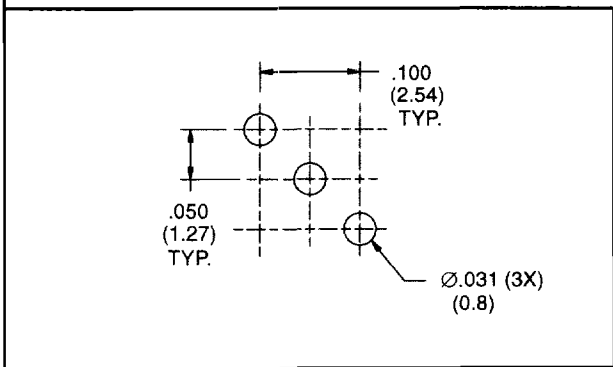


FIGURE 8

