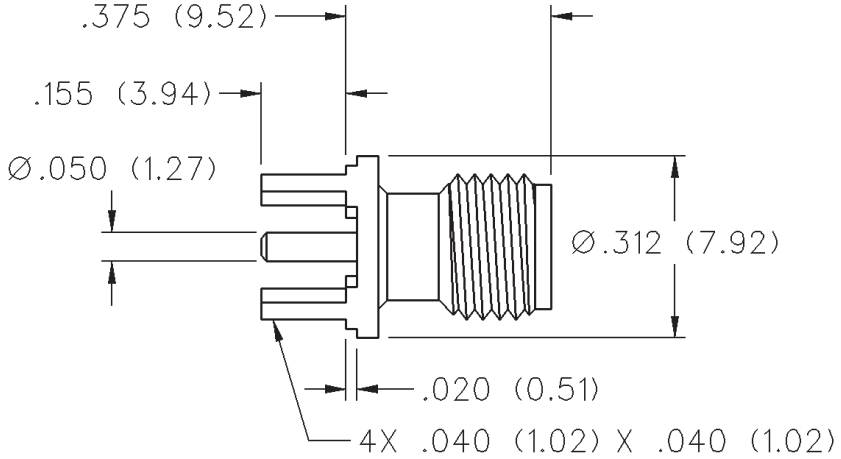
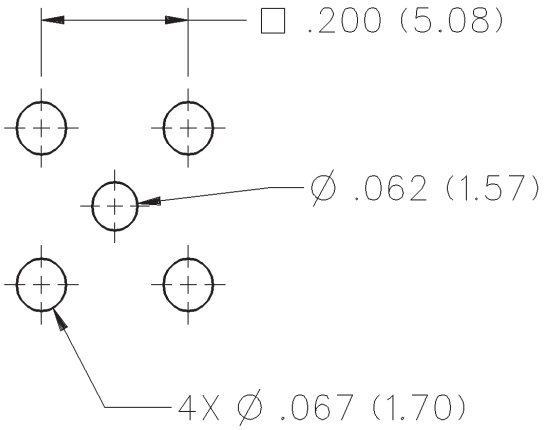
SMA 50 Ohm Reverse Polarity Straight PC Mount Jack Receptacle

INCHES (MILLIMETERS)
CUSTOMER DRAWINGS AVAILABLE UPON REQUEST



GOLD PLATED	NICKEL PLATED
142-4701-201	142-4701-206

Mounting hole layout



Cinch Connectivity Solutions
299 Johnson Avenue SW, Waseca, MN 56093 USA • 800.247.8256 • +1 507 833 8822 • cinchconnectivity.com

SMA Reverse Polarity - 50 Ohm

Specifications

INCHES (MILLIMETERS)
CUSTOMER DRAWINGS AVAILABLE UPON REQUEST

ELECTRICAL RATINGS

Impedance: 50 ohms

Frequency Range:

Flexible cable connectors ..... 0-12.4 GHz
Uncabled receptacles ..... 0-18.0 GHz

VSWR: (f = GHz)	Straight Cabled Connectors	Right Angle Cabled Connectors
RG-316, LMR-100 cable	1.15 + .02f	1.15 + .03f
RG-58, LMR-195 cable	1.17 + .025f	1.17 + .06f
RG-142 cable	1.17 + .02f	1.15 + .03f
LMR-200, LMR-240 cable	1.10 + .03f	1.10 + .06f
Uncabled receptacles		N/A

Working Voltage: (Vrms maximum)†

Connectors for Cable Type	**Sea Level**	**70K Feet**
RG-316; LMR-100, 195, 200	250	65
RG-58, RG-142, LMR-240, uncabled receptacles	335	85

Dielectric Withstanding Voltage: (VRMS minimum at sea level)†

Connectors for RG-316; LMR-100, 195, 200 750
Connectors for RG-58, RG-142, LMR-240, uncabled receptacles . 1000

Corona Level: (Volts minimum at 70,000 feet)=

Connectors for RG-316, LMR-100, 195, 200 190
Connectors for RG-58, RG-142, LMR-240, uncabled receptacles ... 250

Insertion Loss: (dB maximum)

Straight flexible cable connectors ..... .06 $\sqrt{f\ (GHz)}$, tested at 6 GHz
Right angle flexible cable connectors ..... 0.15 $\sqrt{f\ (GHz)}$, tested at 6 GHz
Low loss flexible straight cable connectors ..... 0.06 $\sqrt{f\ (GHz)}$, tested at 1 GHz
Low loss flexible right angle cable connectors ..... 0.15 $\sqrt{f\ (GHz)}$, tested at 1 GHz
Uncabled receptacles, field replaceable ..... N/A

Insulation Resistance: 5000 megohms minimum

Contact Resistance: (milliohms maximum)	**Initial**	**After Environmental**
Center contact (straight cabled connectors and uncabled receptacles)	3.0*	4.0*
Center contact (right angle cabled connectors	4.0	6.0
Outer contact (all connectors)	2.0	N/A
Braid to body (gold plated connectors)	0.5	N/A
Braid to body (nickel plated connectors)	5.0	N/A

RF Leakage: (dB minimum, tested at 2.5 GHz)

Flexible cable connectors ..... -60 dB
Uncabled receptacles and adapters ..... N/A

RF High Potential Withstanding Voltage: (Vrms minimum, tested at 4 and 7 MHz)†

Connectors for RG-316; LMR-100, 195, 200 500
Connectors for RG-58, RG-142, LMR-240, uncabled receptacles ... 670

MECHANICAL RATINGS

Engagement Design: MIL-C-39012, Series SMA
Engagement/Disengagement Force: 2 inch-pounds maximum
Mating Torque: 7 to 10 inch-pounds
Bulkhead Mounting Nut Torque: 15 inch-pounds
Coupling Proof Torque: 15 inch-pounds minimum
Coupling Nut Retention: 60 pounds minimum
Contact Retention:
6 lbs. minimum axial force (captivated contacts)
4 inch-ounce minimum torque (uncabled receptacles)

Cable Retention:	**Axial Force* (pounds)**	**Torque (in-oz)**
Connectors for RG-316, LMR-100	20	N/A
Connectors for LMR195, 200	30	N/A
Connectors for RG-58, LMR-240	40	N/A
Connectors for RG-142	45	N/A

*Or cable breaking strength whichever is less.

Durability: 500 cycles minimum

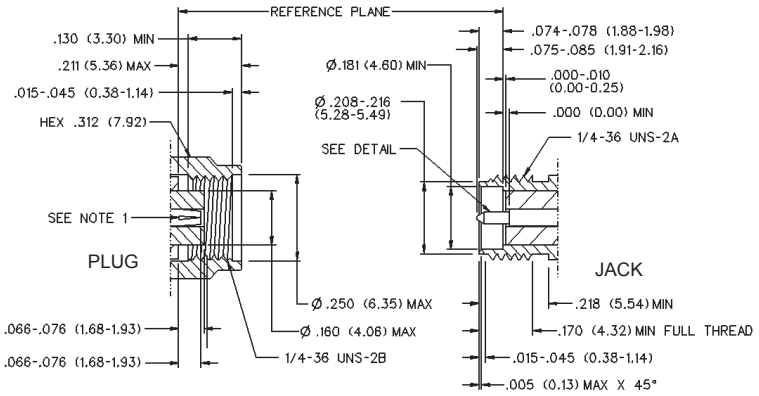
ENVIRONMENTAL RATINGS (Meets or exceed the applicable paragraph of MIL-C-39012)

Temperature Range: - 65°C to + 165°C
Thermal Shock: MIL-STD-202, Method 107, Condition B
Corrosion: MIL-STD-202, Method 101, Condition B
Shock: MIL-STD-202, Method 213, Condition I
Vibration: MIL-STD-202, Method 204, Condition D
Moisture Resistance: MIL-STD-202, Method 106

MATERIAL SPECIFICATIONS

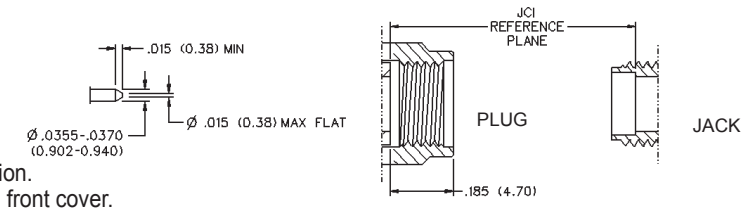
Bodies: Brass per QQ-B-626, gold plated* per MIL-G-45204 .00001" min. or nickel plated per QQ-N-290
Contacts: Male - brass per QQ-B-626, gold plated per MIL-G-45204 .00003" min.
Female - beryllium copper per QQ-C-530, gold plated per MIL-G-45204 .00003" min.
Nut Retention Spring: Beryllium copper per QQ-C-533. Unplated
Insulators: PTFE fluorocarbon per ASTM D 1710 and ASTM D 1457 or Tefzel per ASTM D 3159
Expansion Caps: Brass per QQ-B-613, gold plated per MIL-G-45204 .00001" min. or nickel plated per QQ-N-290
Crimp Sleeves: Copper per WW-T-799 or brass per QQ-B-613, gold plated per MIL-G-45204 .00001" min. or nickel plated per QQ-N-290
Mounting Hardware: Brass per QQ-B-626 or QQ-B-613, gold plated per MIL-G-45204 .00001" min. or nickel plated per QQ-N-290

MATING ENGAGEMENT FOR SMA REVERSE POLARITY SERIES PER FCC RULE 15 NON-STANDARD INTERFACE



NOTES

1. ID OF CONTACT TO MEET VSWR, CONTACT RESISTANCE AND INSERTION WITHDRAWAL FORCES WHEN MATED WITH DIA .0355-.0370 MALE PIN.



†Avoid user injury due to misapplication.
See safety advisory definitions inside front cover.

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