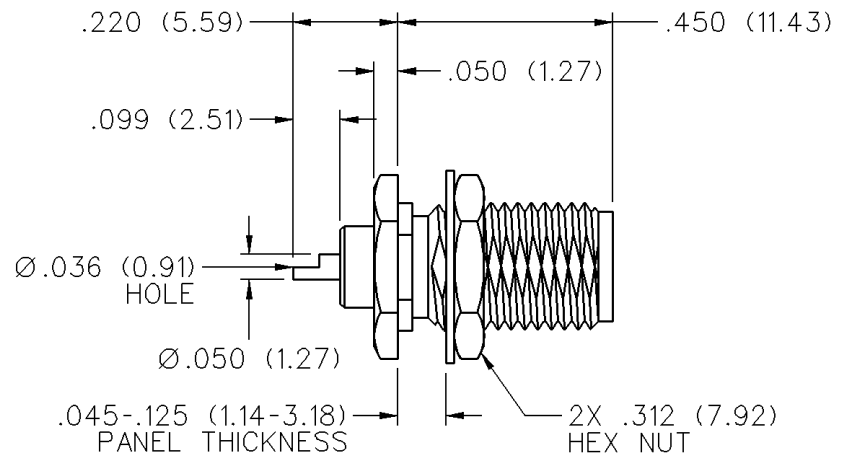
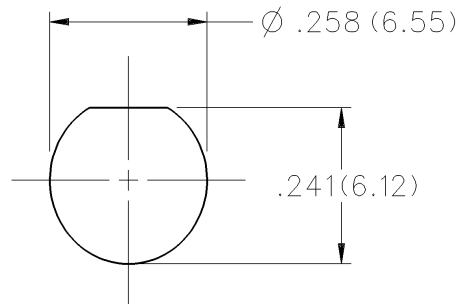


50 Ohm SMA Rear Mount Bulkhead Jack Receptacle



VSWR & FREQ. RANGE	GOLD PLATED	NICKEL PLATED
VSWR: N/A 0-18 GHz	142-0701-401	142-0701-406

Mounting hole layout



SMA - 50 Ohm Connectors

Specifications

ELECTRICAL RATINGS

Impedance: 50 ohms

Frequency Range:

Dummy loads	0-2 GHz
Flexible cable connectors	0-12.4 GHz
Uncabled receptacles, RA semi-rigid and adapters	0-18.0 GHz
Straight semi-rigid cable connectors and field replaceable connectors	0-26.5 GHz

VSWR: (f = GHz)

	Straight Cabled Connectors	Right Angle Cabled Connectors
RG-178 cable	1.20 + .025f	1.20 + .03f
RG-316, LMR-100 cable	1.15 + .02f	1.15 + .03f
RG-58, LMR-195 cable	1.15 + .01f	1.15 + .02f
RG-142 cable	1.15 + .01f	1.15 + .02f
LMR-200, LMR-240 cable	1.10 + .03f	1.10 + .06f
.086 semi-rigid	1.07 + .008f	1.18 + .015f
.141 semi-rigid (w/contact)	1.05 + .008f	1.15 + .015f
.141 semi-rigid (w/o contact)	1.035 + .005f	

Jack-bulkhead jack adapter and plug-plug adapter

Jack-jack adapter and plug-jack adapter

Uncabled receptacles, dummy loads

Field replaceable (see page 59)

Working Voltage: (Vrms maximum)†

Connectors for Cable Type

	Sea Level	70K Feet
RG-178	170	45
RG-316; LMR-100, 195, 200	250	65
RG-58, RG-142, LMR-240, .086 semi-rigid, uncabled receptacles, .141 semi-rigid w/o contact ...	335	85
.141 semi-rigid with contact and adapters	500	125
Dummy loads	N/A	

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

Connectors for RG-178

Connectors for RG-316; LMR-100, 195, 200

Connectors for RG-58, RG-142, LMR-240, .086 semi-rigid, field replaceable, uncabled receptacles

Connectors for .141 semi-rigid with contact and adapters

Connectors for .141 semi-rigid w/o contact, dummy loads

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

Connectors for RG-178

Connectors for RG-316; LMR-100, 195, 200

Connectors for RG-58, RG-142, LMR-240, .086 semi-rigid, uncabled receptacles, .141 semi-rigid w/o contact

Connectors for .141 semi-rigid with contact and adapters

Dummy loads

Dummy loads

Dummy loads

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Dummy loads

Insertion Loss: (dB maximum)

Straight flexible cable connectors and adapters

Right angle flexible cable connectors

Straight semi-rigid cable connectors with contact

Right angle semi-rigid cable connectors

Straight semi-rigid cable connectors w/o contact

Straight low loss flexible cable connectors

Right Angle low loss flexible cable connectors

Uncabled receptacles, field replaceable, dummy loads

Uncabled receptacles, field replaceable, dummy loads

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Uncabled receptacles, field replaceable, dummy loads

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:

Connectors for RG-178

Connectors for RG-316, LMR-100

Connectors for LMR-195, 200

Connectors for RG-58, LMR-240

Connectors for RG-142

Connectors for .086 semi-rigid

Connectors for .141 semi-rigid

*Or cable breaking strength whichever is less.

Durability: 500 cycles minimum

100 cycles minimum for .141 semi-rigid connectors w/o contact

Shock: MIL-STD-202, Method 213, Condition I

Vibration: MIL-STD-202, Method 204, Condition D

Moisture Resistance: MIL-STD-202, Method 106

ENVIRONMENTAL RATINGS (Meets or exceeds 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

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

SMA - 50 Ohm Connectors

Specifications

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 or PFA 340 per ASTM

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

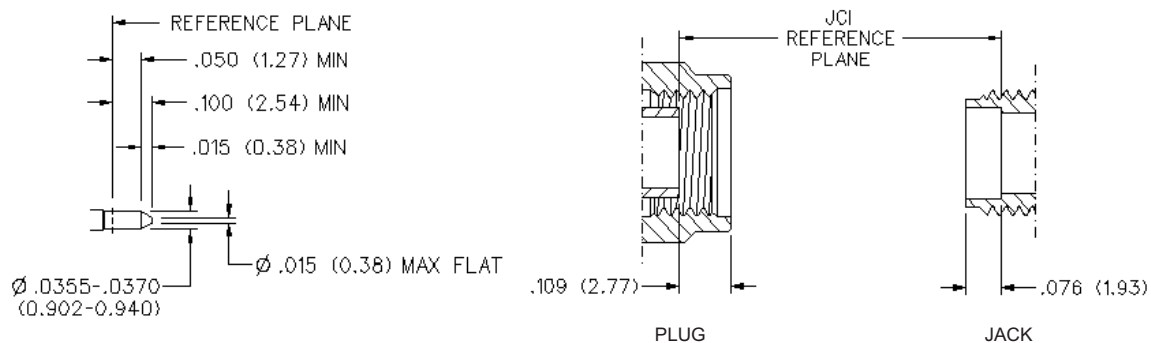
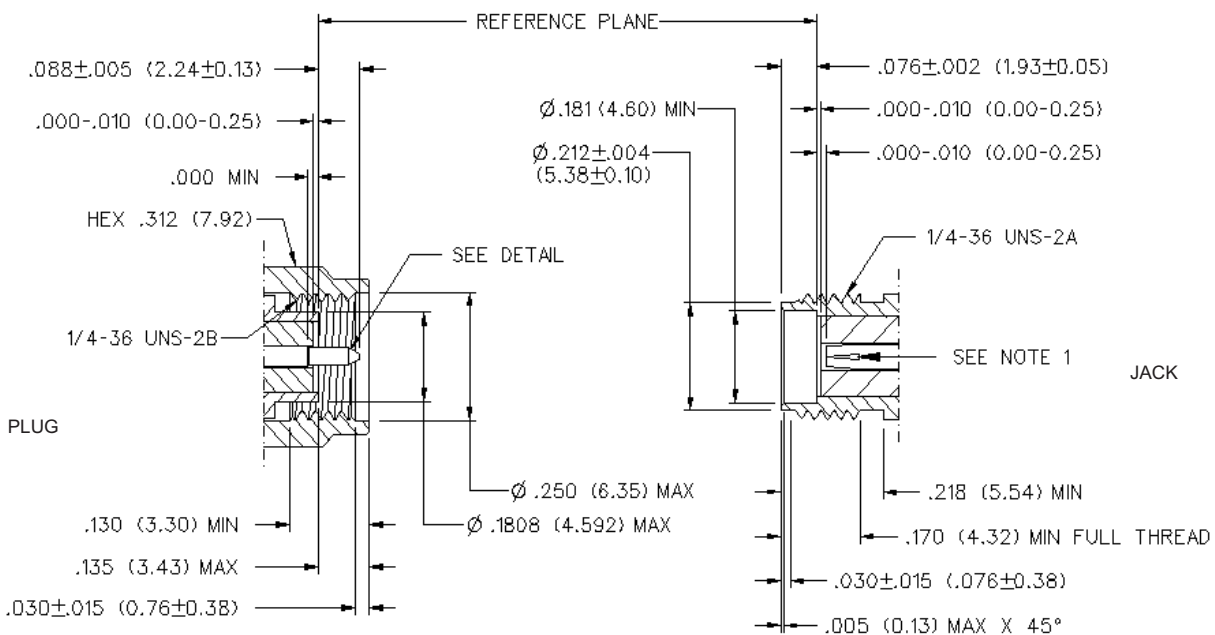
Mounting Hardware: Brass per QQ-B-626 or QQ-B-613, gold plated per MIL-G-45204 .00001" min. or nickel plated per QQ-N-290

Seal Rings: Silicone rubber per ZZ-R-765

EMI Gaskets: Conductive silicone rubber per MIL-G-83528, Type M

* All gold plated parts include a .00005" min. nickel underplate barrier layer.

Mating Engagement for SMA Series per MIL-C-39012



NOTES

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