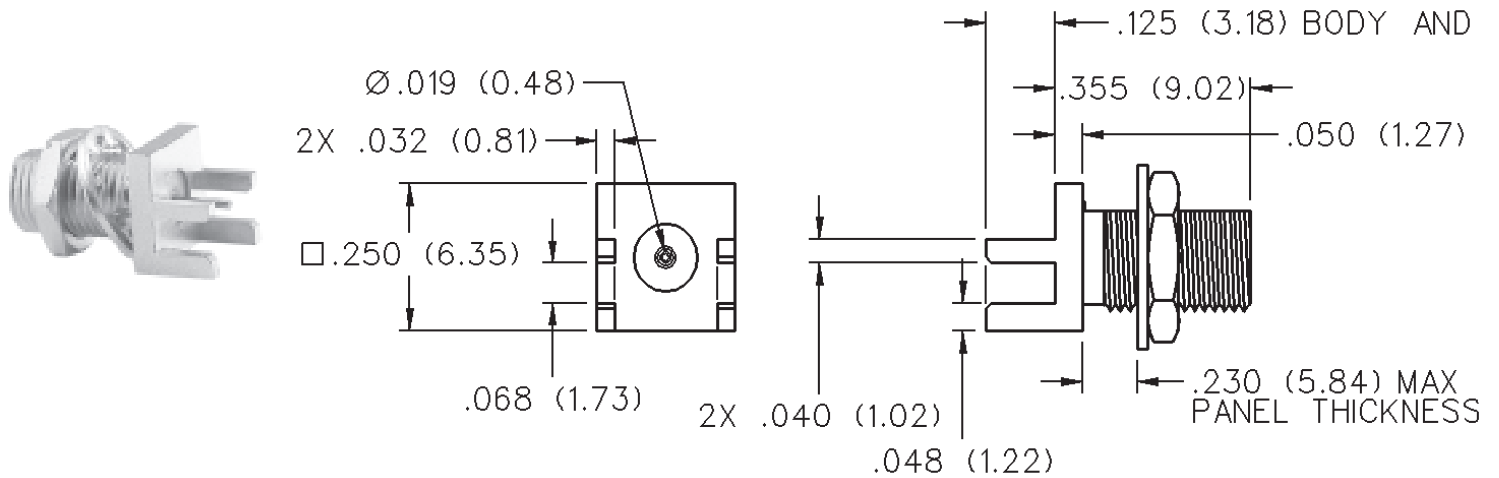


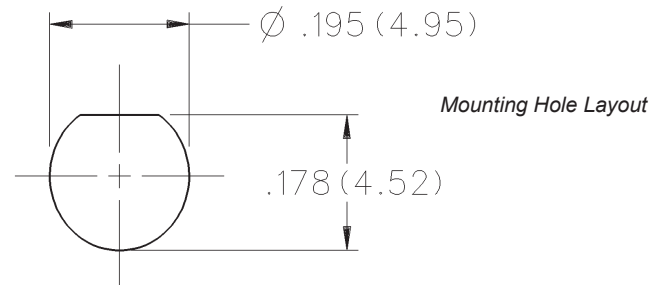
# MCX Reverse Polarity End Launch Bulkhead Jack Receptacle - Round Contact



INCHES (MILLIMETERS)  
CUSTOMER DRAWINGS AVAILABLE UPON REQUEST



GOLD PLATED	NICKEL PLATED	BOARD THICKNESS
133-5701-801	133-5701-806	.062 (1.57)



# MCX Reverse Polarity - 50 Ohm

## Specifications



INCHES (MILLIMETERS)  
CUSTOMER DRAWINGS AVAILABLE UPON REQUEST

### ELECTRICAL RATINGS

**Impedance:** 50 Ohms

**Frequency Range:** 0-6 GHz

**VSWR:** (f = GHz)

	Straight Cabled Connectors	Right Angle Cabled Connectors
RG-178 cable .....	1.17 + .04f	1.07 + .06f
RG-316 cable .....	1.13 + .04f	1.07 + .04f

Uncabled receptacles ..... N/A

**Working Voltage:** (Vrms maximum)

**Connectors for Cable Type**      **Sea Level**      **70K Feet**

RG-178 .....	250	65
RG-316 uncabled receptacles .....	335	85

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

Connectors for RG-178 .....	750
Connectors for RG-316 uncabled receptacles .....	1000

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

Connectors for RG-178 .....	190
Connectors for RG-316 uncabled receptacles .....	250

**Insertion Loss:** (dB maximum, tested at 1 GHz)

Straight cable connectors .....	0.1 dB
Right angle cable connectors .....	0.2 dB
Uncabled receptacles .....	N/A

**Insulation Resistance:** 10000 megohms minimum

**Contact Resistance:** (milliohms maximum)

	Initial	After Environmental
Center contact (straight cabled connectors, uncabled receptacles) .....	5.0	8.0
Center contact (right angle cabled connectors) ....	5.0	15.0
Outer contact .....	1.0	1.5
Braid to body (gold plated connectors) .....	1.0	N/A
Braid to body (nickel plated connectors) .....	2.5	N/A

**RF Leakage:** (dB typical tested at 2.5 GHz)

Cable connectors .....	-55 dB
Uncabled receptacles .....	N/A

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

Connectors for RG-178 .....	500
Connectors for RG-316 .....	700
Uncabled receptacles .....	600

### MECHANICAL RATINGS

**Engagement Force:** 5.6 pounds maximum axial force

**Disengagement Force:** 8 pounds maximum axial force, 1.0 pound min.

**Contact Retention:** 2.3 lbs. min. axial force (captivated contacts)

1 inch-ounce min. torque (uncabled receptacles)

Cable Retention:	Axial Force* (pounds)	Torque (in-oz)
Connectors for RG-178 .....	10	N/A
Connectors for RG-316 .....	20	N/A
Connectors for RG-316DS .....	25	N/A

\* or cable breaking strength whichever is less.

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

**Durability:** 500 cycles minimum

**Temperature Range:** - 65°C to + 165°C

**Thermal Shock:** MIL-STD-202, Method 107, Condition F

**Corrosion:** MIL-STD-202, Method 101, Condition B

**Shock:** MIL-STD-202, Method 213, Condition B

**Vibration:** MIL-STD-202, Method 204, Condition B

**Moisture Resistance:** MIL-STD-202, Method 106

### MATERIAL SPECIFICATIONS

**Bodies:** Brass per QQ-B-626 or zinc per ASTM B86-71, 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.

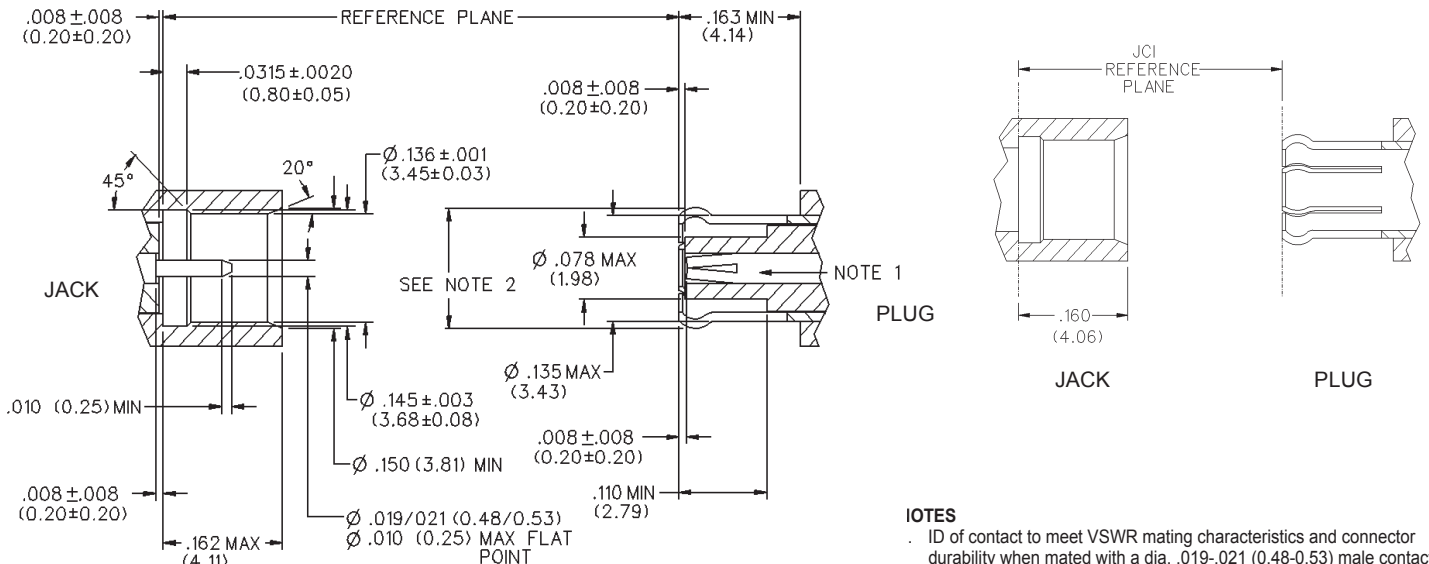
**Insulators:** PTFE fluorocarbon per ASTM D 1710 and ASTM D 1457

**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, gold plated per MIL-G-45204 .00001" min. or nickel plated per QQ-N-290

**Mounting Hardware:** Brass (nuts) per QQ-B-626 or phosphor bronze (lockwashers) QQ-B-750, gold plated per MIL-G-45204 .00001" min. or nickel plated per QQ-N-290

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



† Avoid user injury due to misapplication.

See safety advisory definitions inside front cover.

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

### NOTES

- ID of contact to meet VSWR mating characteristics and connector durability when mated with a dia. .019-.021 (0.48-0.53) male contact.
- Must meet the force to engage and disengage when mated with mating part.