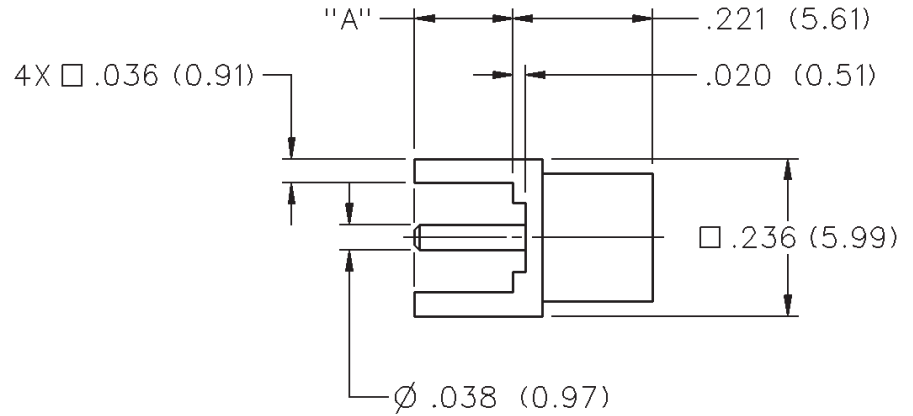


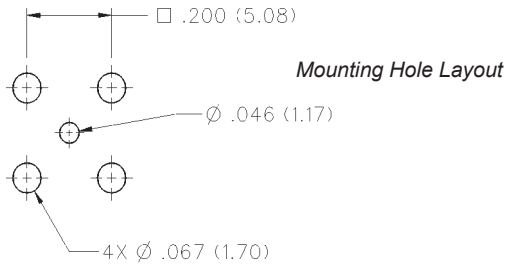
# MCX 50 Ohm Straight Jack Receptacle



INCHES (MILLIMETERS)  
CUSTOMER DRAWINGS AVAILABLE UPON REQUEST



DIMENSION "A"	GOLD PLATED	NICKEL PLATED
.110 (2.79)	133-3701-211	133-3701-216



# MCX - 50 Ohm Connectors



## Specifications

INCHES (MILLIMETERS)  
CUSTOMER DRAWINGS AVAILABLE UPON REQUEST

### ELECTRICAL RATINGS

Impedance: 50 Ohms

Frequency Range: Connectors ..... 0-6 GHz  
Dummy loads ..... 0-1 GHz

VSWR: (f = GHz) Straight Cabled Right Angle  
Connectors Cabled Connectors

RG-178 cable ..... 1.17 + .04f 1.07 + .06f

RG-316 and .086 semi-rigid cable ... 1.13 + .04f 1.07 + .04f

Adapters ..... 1.13 + .04f

Uncabled receptacles, Dummy loads ..... N/A

Working Voltage: (Vrms maximum)†

Connectors for Cable Type Sea Level 70K Feet

RG-178 ..... 250 65

RG-316, .086 semi-rigid uncabled

uncabled receptacles, adapters ..... 335 85

Dummy loads ..... N/A

Dielectric Withstanding Voltage: (VRMS minimum at sea level)

Connectors for RG-178 ..... 750

Connectors for RG-316, .086 semi-rigid,

uncabled receptacles, adapters ..... 1000

Dummy loads ..... N/A

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

Connectors for RG-178 ..... 190

Connectors for RG-316, .086 semi-rigid

uncabled receptacles, adapters ..... 250

Dummy loads ..... N/A

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

Straight cable connectors and adapters ..... 0.1 dB

Right angle cable connectors ..... 0.2 dB

Uncabled receptacles, dummy loads ..... N/A

Insulation Resistance: 10,000 megohms minimum

Contact Resistance: (milliohms maximum)

	After	
	Initial	Environmental
Center contact (straight cabled connectors, uncabled receptacles and adapters) .....	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 High Potential Withstanding Voltage: (Vrms minimum, tested at 4 and 7 MHz)

Connectors for RG178 ..... 500

Connectors for RG316 and adapters ..... 700

.086 semi-rigid ..... 670

Uncabled receptacles ..... 600

Dummy loads ..... N/A

Power Rating (Dummy Load): 0.5 watt @ +25°C, derated to 0.25 watt @ +125°C

### MECHANICAL RATINGS

Engagement Design: Compatible with CECC 22220, Series MCX

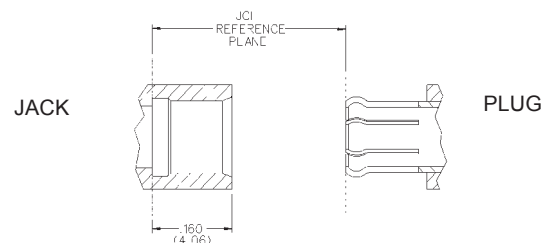
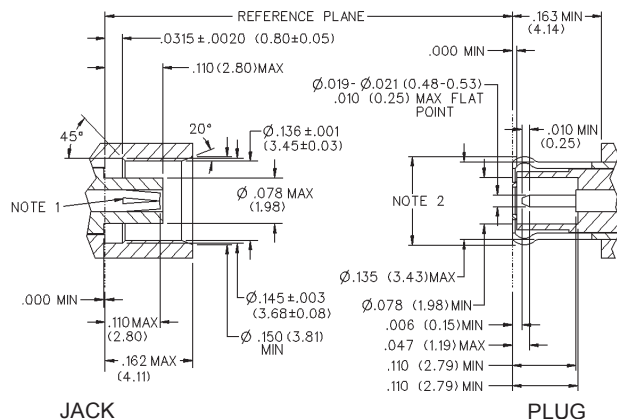
Engagement Force: 5.6 pounds maximum axial force

Disengagement Force: 8 pounds maximum axial force, 1 pound min.

Contact Retention: 2.3 pounds min. axial force (captivated contacts) 1 inch-ounce min. torque (uncabled receptacles)

Cable Retention:	Axial Force* (pounds)	Torque (in-oz)
Connectors for RG178 .....	10	N/A
Connectors for RG316 .....	20	N/A
Connectors for RG316DS .....	25	N/A
Connectors for .086 semi-rigid .....	30	16

### MATING ENGAGEMENT FOR MCX SERIES COMPATIBLE WITH CECC 22220



#### 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.

Avoid user injury due to misapplication. See safety advisory definitions on page 2.

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

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