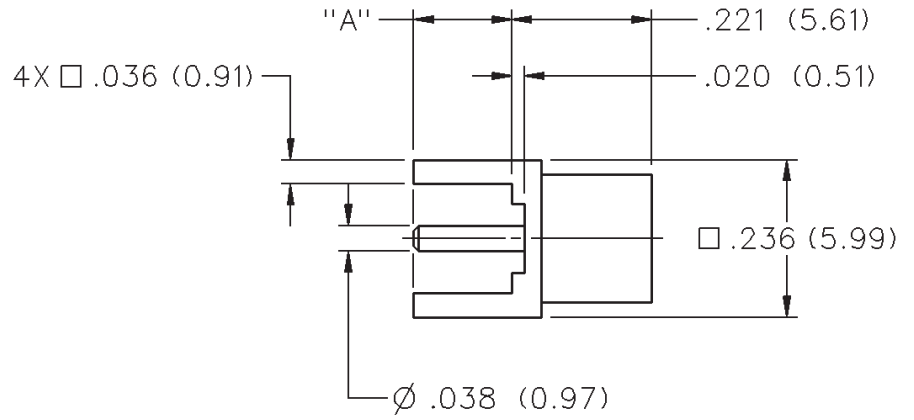


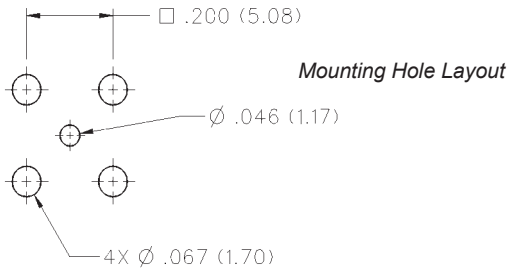
MCX 50 Ohm Straight Jack Receptacle



INCHES (MILLIMETERS)
CUSTOMER DRAWINGS AVAILABLE UPON REQUEST



DIMENSION "A"	GOLD PLATED	NICKEL PLATED
.155 (3.94)	133-3701-201	133-3701-206



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	N/A

RG-178

RG-316, .086 semi-rigid uncabled

uncabled receptacles, adapters

Dummy loads

Dielectric Withstanding Voltage: (VRMS minimum at sea level)

Connectors for RG-178

Connectors for RG-316, .086 semi-rigid,
uncabled receptacles, adapters

Dummy loads

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

Connectors for RG-178

Connectors for RG-316, .086 semi-rigid
uncabled receptacles, adapters

Dummy loads

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

Straight cable connectors and adapters

Right angle cable connectors

Uncabled receptacles, dummy loads

Insulation Resistance: 10,000 megohms minimum

Contact Resistance: (milliohms maximum)

	Initial	After 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 Leakage: (dB typical tested at 2.5 GHz)

Cable connectors

Uncabled receptacles and adapters, dummy loads

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

Connectors for RG178

Connectors for RG316 and adapters

.086 semi-rigid

Uncabled receptacles

Dummy loads

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*	Torque
	(pounds)	(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

Connectors for RG178

Connectors for RG316

Connectors for RG316DS

Connectors for .086 semi-rigid

* or cable breaking strength whichever is less.

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

Durability: 500 cycles minimum

Temperature Range: Connectors

Dummy loads

Thermal Shock: MIL-STD-202, Method 107, Condition F (N/A dummy loads)

Corrosion: MIL-STD-202, Method 101, Condition B (N/A dummy loads)

Shock: MIL-STD-202, Method 213, Condition B (N/A dummy loads)

Vibration: MIL-STD-202, Method 204, Condition B (N/A dummy loads)

Moisture Resistance: MIL-STD-202, Method 106 (N/A dummy loads)

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 or bright tin plated

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

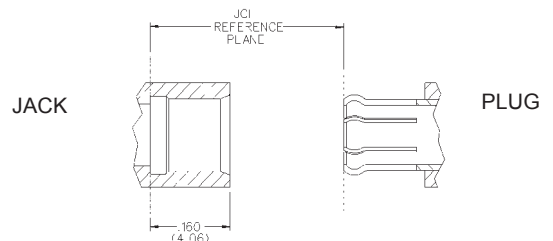
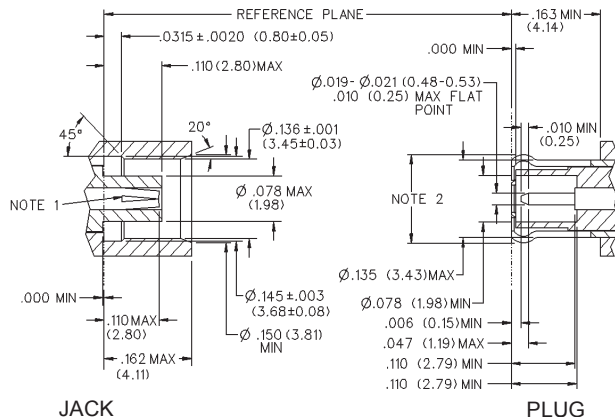
Crimp Sleeves: Copper per WW-T-799, gold plated per MIL-G-45204 .00001" min. or nickel plated per QQ-N-290

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

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.

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. $\phi .019 - \phi .021$ (0.48-0.53) male contact.
- Must meet the force to engage and disengage when mated with mating part.