

## Excellent Integrated System Limited

Stocking Distributor

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[Bel Fuse Inc.](#)  
[133-9701-211](#)

For any questions, you can email us directly:  
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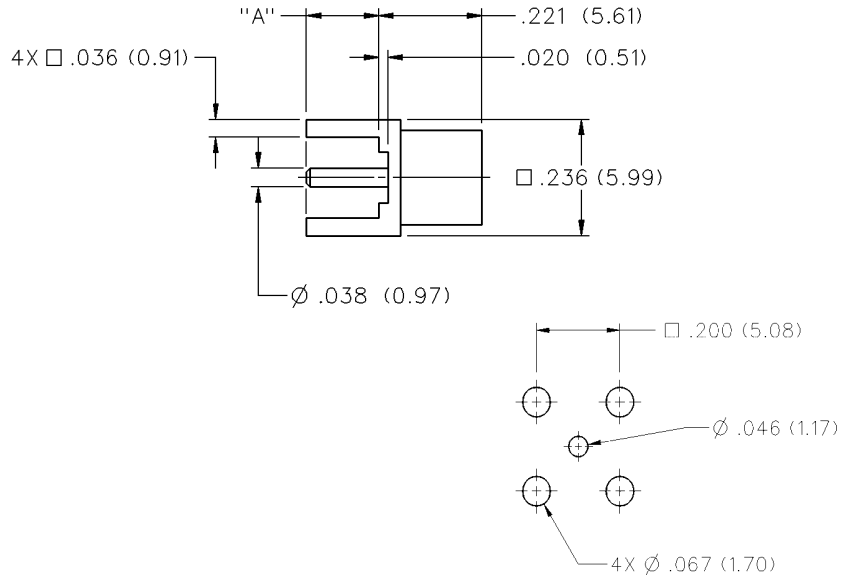


# MCX Non-Magnetic RF Connectors

PC Mount

INCHES (MILLIMETERS)  
 CUSTOMER DRAWINGS AVAILABLE UPON REQUEST

## Straight Jack Receptacle



| DIMENSION "A" | GOLD PLATED  |
|---------------|--------------|
| .110 (2.79)   | 133-9701-211 |

## SPECIFICATIONS

### ELECTRICAL RATINGS

**Impedance:** 50 Ohms

**Frequency Range:** 0-6 GHz

**VSWR:** (f = GHz)

|                      | Straight Cabled Connectors | Right Angle Cabled Connectors |
|----------------------|----------------------------|-------------------------------|
| 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-316                    | 335       | 85       |

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

|   |      |
|---|------|
| Connectors for RG-316, uncabled receptacles | 1000 |
|---|------|

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

|   |     |
|---|-----|
| 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:** 10,000 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   | 1.0     | N/A                 |

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

|                      |     |
|----------------------|-----|
| Cable connectors     | -55 |
| Uncabled receptacles | N/A |

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

|                      |     |
|----------------------|-----|
| Cabled connectors    | 700 |
| Uncabled receptacles | 600 |

### 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 RG316   | 20                    | N/A            |
| Connectors for RG316DS | 25                    | N/A            |

\* or cable breaking strength whichever is less.

**ENVIRONMENTAL RATINGS (Meets or exceed the applicable paragraph of MIL-PRF-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