100PSM-CR

SMA Male for CNT-100 braided cable

Product Classification

<table>
<thead>
<tr>
<th>Brand</th>
<th>CNT®</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product Type</td>
<td>Braided cable connector</td>
</tr>
</tbody>
</table>

General Specifications

| Interface | SMA Male |
| Body Style | Straight |

Electrical Specifications

| Operating Frequency Band | 0 – 6000 MHz |
| Average Power at Frequency | 50.0 W @ 900 MHz |
| Cable Impedance | 50 ohm |
| Connector Impedance | 50 ohm |
| RF Operating Voltage, maximum (vrms) | 173.00 V |
| dc Test Voltage | 500 V |
| Outer Contact Resistance, maximum | 2.50 mOhm |
| Inner Contact Resistance, maximum | 3.00 mOhm |
| Insulation Resistance, minimum | 5000 MOhm |
| Peak Power, maximum | 0.60 kW |
| Insertion Loss, typical | 0.05 dB |
Outline Drawing

MATES TO MIL-STD-348, 310.2 DR EQUIVALENT

7.9mm HEX FLATS

(M9.2mm)

(18.4mm)

Mechanical Specifications

**Outer Contact Attachment Method** | Crimp
---|---
**Outer Contact Plating** | Trimetal
**Inner Contact Plating** | Gold
**Inner Contact Attachment Method** | Solder
**Interface Durability** | 500 cycles
**Interface Durability Method** | IEC 61169-15:9.5
**Connector Retention Tensile Force** | 98 N | 22 lbf
**Insertion Force** | 22.00 N | 4.95 lbf
**Insertion Force Method** | IEC 61169-15:9.3.5
**Pressurizable** | No
**Coupling Nut Proof Torque** | 1.70 N-m | 1.25 ft lb
**Coupling Nut Proof Torque Method** | IEC 61169-15:9.3.6
**Coupling Nut Retention Force** | 180.00 N | 40.47 lbf
**Coupling Nut Retention Force Method** | IEC 61169-15:9.3.11

Dimensions

**Nominal Size** | 0.110 in
**Diameter** | 7.92 mm | 0.31 in
Length: 18.39 mm | 0.72 in  
Weight: 5.74 g | 0.01 lb  
Width: 7.92 mm | 0.31 in

Environmental Specifications

Operating Temperature: -40 °C to +85 °C (-40 °F to +185 °F)  
Storage Temperature: -65 °C to +125 °C (-85 °F to +257 °F)  
Water Jetting Test Mating: Mated  
Mechanical Shock Test Method: IEC 60068-2-27  
Climatic Sequence Test Method: IEC 60068-1  
Thermal Shock Test Method: IEC 60068-2-14  
Vibration Test Method: IEC 60068-2-6  
Corrosion Test Method: IEC 60068-2-11

Standard Conditions

Attenuation, Ambient Temperature: 20 °C | 68 °F  
Average Power, Ambient Temperature: 40 °C | 104 °F  
Average Power, Inner Conductor Temperature: 100 °C | 212 °F

Return Loss/VSWR

<table>
<thead>
<tr>
<th>Frequency Band</th>
<th>VSWR</th>
<th>Return Loss (dB)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0–3000 MHz</td>
<td>1.05</td>
<td>30.00</td>
</tr>
<tr>
<td>3000–6000 MHz</td>
<td>1.12</td>
<td>24.80</td>
</tr>
</tbody>
</table>

Regulatory Compliance/Certifications

Agency
- RoHS 2011/65/EU  
- ISO 9001:2015  
- China RoHS SJ/T 11364-2014

Classification
- Compliant by Exemption
- Designed, manufactured and/or distributed under this quality management system
- Above Maximum Concentration Value (MCV)

* Footnotes

Insertion Loss, typical: 0.05√freq (GHz) (not applicable for elliptical waveguide)