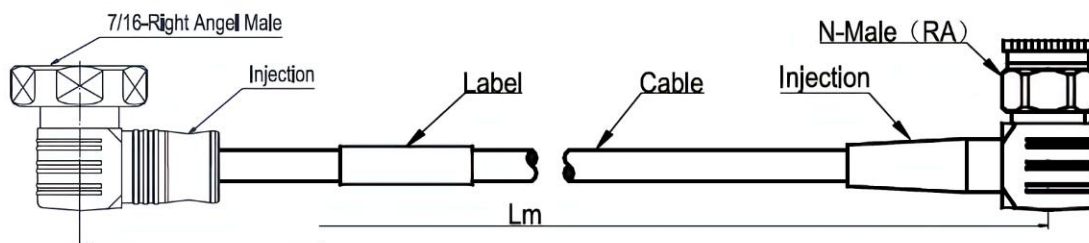




RF cable assembly, 1/2 in super-flexible coaxial cable with FRNC jacket, 7/16 DIN male right angle to N male right angle.



General Specifications

| | |
|-------------------------|---|
| Flexibility | Super-flexible |
| Jacket Color | Black |
| Performance Note | Attenuation guaranteed within the tolerance $\pm 10\%$ |
| Structure Note | Dimension guaranteed within the tolerance $\pm 1\%$ |
| Nominal Cable Size | 1/2 in |
| Connector 1 | 7/16 DIN male right angle |
| Connector 2 | N male right angle |
| Frequency Band | DC - 4 GHz |
| Insertion Loss | Cable loss + Connector loss ($0.1 \cdot \sqrt{FGHz}$) |
| Return Loss | $\leq -28\text{dB}$ @DC-1GHz $\leq -26\text{dB}$ @1.0-2.2GHz $\leq -23\text{dB}$ @2.2-3.0GHz $\leq -22\text{dB}$ @3.0-3.8GHz |
| PIM (900MHz, 3rd Order) | $\leq -160\text{dBc}$ @ $2 \times 43\text{dBm}$ |
| Impedance | 50 ohms ± 1 ohm |

Cable Specifications

| | |
|-----------------------------|------------|
| Maximum Available Frequency | 10.2 GHz |
| Cut-off Frequency | 13 GHz |
| Velocity Ratio | 81% |
| Peak Power | 16 kW |
| Insulation Resistance | 5000 MΩ·km |
| DC Breakdown Voltage | 2500 V |
| Nominal Capacitance | 83 pF/m |
| Nominal Inductance | 0.19 μH/m |

Cable Material

| | |
|-----------------|--------------------------------|
| Inner Conductor | Copper-Clad Aluminum Wire |
| Dielectric | Physical Foam Polyethylene |
| Outer Conductor | Helical Corrugated Copper Tube |
| Jacket | FRNC |

Attenuations

| Frequency (MHz) | Attenuation (dB/100 m) | Attenuation (dB/100 ft) | Average Power (kW) |
|-----------------|------------------------|-------------------------|--------------------|
| 0.5 | 0.23 | 0.07 | 15.6 |
| 1 | 0.32 | 0.10 | 15.6 |
| 1.5 | 0.40 | 0.12 | 15.6 |
| 2 | 0.46 | 0.14 | 15.6 |
| 10 | 1.03 | 0.31 | 10.1 |
| 20 | 1.48 | 0.45 | 7.07 |
| 30 | 1.81 | 0.55 | 5.75 |
| 50 | 2.36 | 0.72 | 4.42 |
| 88 | 3.16 | 0.96 | 3.30 |
| 100 | 3.38 | 1.03 | 3.08 |
| 108 | 3.51 | 1.07 | 2.96 |
| 150 | 4.17 | 1.27 | 2.49 |
| 174 | 4.51 | 1.37 | 2.30 |
| 200 | 4.86 | 1.48 | 2.14 |
| 300 | 6.03 | 1.84 | 1.72 |

| | | | |
|------|-------|-------|------|
| 400 | 7.05 | 2.15 | 1.48 |
| 450 | 7.48 | 2.28 | 1.38 |
| 500 | 7.96 | 2.43 | 1.31 |
| 512 | 8.07 | 2.46 | 1.29 |
| 600 | 8.80 | 2.68 | 1.18 |
| 700 | 9.58 | 2.92 | 1.09 |
| 800 | 10.30 | 3.14 | 1.01 |
| 824 | 10.50 | 3.20 | 0.99 |
| 900 | 11.09 | 3.38 | 0.91 |
| 960 | 11.49 | 3.50 | 0.90 |
| 1000 | 11.68 | 3.56 | 0.88 |
| 1250 | 13.27 | 4.04 | 0.78 |
| 1500 | 14.75 | 4.50 | 0.70 |
| 1700 | 15.84 | 4.83 | 0.65 |
| 1800 | 16.44 | 5.01 | 0.63 |
| 2000 | 17.43 | 5.31 | 0.59 |
| 2100 | 17.92 | 5.46 | 0.58 |
| 2200 | 18.42 | 5.61 | 0.56 |
| 2400 | 18.71 | 5.70 | 0.55 |
| 3000 | 22.28 | 6.79 | 0.42 |
| 4000 | 26.44 | 8.06 | 0.39 |
| 6000 | 34.06 | 10.38 | 0.30 |
| 8000 | 40.99 | 12.49 | 0.25 |

Return Loss / VSWR

| Frequency Band | VSWR | Return Loss (dB) | Tolerance |
|----------------|------|------------------|-----------|
| DC-1.0GHz | 1.08 | 28.3 | 5% |
| 1.0-2.2GHz | 1.12 | 24.9 | 5% |
| 2.2-3.0GHz | 1.15 | 23.1 | 5% |
| 3.0-3.8GHz | 1.17 | 22.1 | 5% |

Mechanical Specifications

| | |
|-----------------------------|--|
| Bend Protection | Molding |
| Label | Wrap Sticker |
| Bending Radius (Single) | ≥17 mm |
| Bending Radius (Repeated) | ≥35 mm |
| Number of Bending (Typical) | ≤20 |
| Tensile Strength | 1050N |
| Connector Tightening Torque | ≤30N.m for 7/16 DIN Type ≤8N.m for 4.3-10 Type ≤8N.m for mini-DIN Type ≤1.5N.m for N Type ≤1.8N.m for NEX10 Type |
| Unit Packing | 1pcs in PE bag |
| Package Packing | Quality Carton |

Environmental Specifications

| | |
|--------------------------|----------------------------------|
| Installation Temperature | -20 °C to +55 °C |
| Operating Temperature | -20 °C to +85 °C |
| Storage Temperature | -25 °C to +85 °C |
| Relative Humidity | 5% - 95% |
| IP Rating | Mated IP68, 1m, 1.5hrs, 20 deg-C |

Regulatory Compliances

| | |
|---------------|-----------|
| ISO 9001:2015 | Compliant |
| ROHS | Compliant |
| China RoHS | Compliant |
| UK RoHS | Compliant |
| REACH | Compliant |
| EU/CE | Compliant |

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