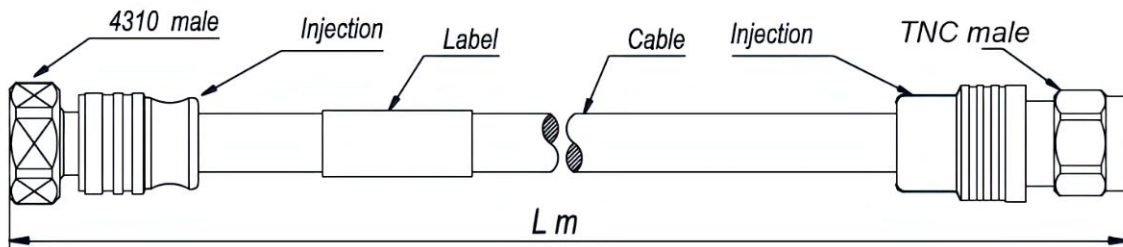




RF cable assembly, 1/4 in super-flexible coaxial cable with FRNC jacket, 4.3-10 male to TNC male.



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 | 1/4 in |
| Connector 1 | 4.3-10 male |
| Connector 2 | TNC male |
| 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 | 20.4 GHz |
| Cut-off Frequency | 25 GHz |
| Velocity Ratio | 82% |
| Peak Power | 8.2 kW |
| Insulation Resistance | 3000 MΩ·km |
| DC Breakdown Voltage | 1600 V |
| Nominal Capacitance | 80 pF/m |
| Nominal Inductance | 0.195 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 | 0.40 | 0.12 | 6.40 |
| 1 | 0.57 | 0.17 | 6.40 |
| 1.5 | 0.70 | 0.21 | 6.40 |
| 2 | 0.81 | 0.25 | 6.40 |
| 10 | 1.81 | 0.55 | 3.97 |
| 20 | 2.57 | 0.78 | 2.80 |
| 30 | 3.16 | 0.96 | 2.28 |
| 50 | 4.10 | 1.25 | 1.76 |
| 88 | 5.15 | 1.57 | 1.32 |
| 100 | 5.52 | 1.68 | 1.13 |
| 108 | 6.07 | 1.85 | 1.01 |
| 150 | 7.18 | 2.19 | 1.00 |
| 174 | 7.74 | 2.36 | 0.93 |
| 200 | 8.33 | 2.54 | 0.87 |
| 300 | 10.31 | 3.14 | 0.70 |

| | | | |
|------|-------|-------|------|
| 400 | 11.98 | 3.65 | 0.60 |
| 450 | 12.21 | 3.72 | 0.52 |
| 500 | 13.37 | 4.08 | 0.51 |
| 512 | 13.56 | 4.13 | 0.50 |
| 600 | 14.75 | 4.50 | 0.45 |
| 700 | 16.04 | 4.89 | 0.45 |
| 800 | 17.23 | 5.25 | 0.42 |
| 824 | 17.43 | 5.31 | 0.41 |
| 900 | 17.76 | 5.41 | 0.37 |
| 960 | 18.91 | 5.76 | 0.37 |
| 1000 | 19.41 | 5.92 | 0.37 |
| 1250 | 21.78 | 6.64 | 0.30 |
| 1500 | 24.06 | 7.33 | 0.28 |
| 1700 | 25.74 | 7.85 | 0.28 |
| 1800 | 26.08 | 7.95 | 0.25 |
| 2000 | 28.22 | 8.60 | 0.25 |
| 2100 | 28.91 | 8.81 | 0.24 |
| 2200 | 29.70 | 9.05 | 0.24 |
| 2400 | 31.42 | 9.58 | 0.21 |
| 3000 | 34.89 | 10.63 | 0.19 |
| 4000 | 41.39 | 12.62 | 0.17 |
| 6000 | 52.18 | 15.90 | 0.14 |
| 8000 | 61.78 | 18.83 | 0.12 |

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) | ≥12 mm |
| Bending Radius (Repeated) | ≥25 mm |
| Number of Bending (Typical) | ≤9 |
| Tensile Strength | 680N |
| 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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