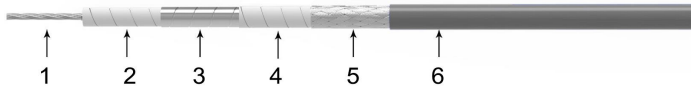


Features & Benefits

- Excellent phase stability with flexure 18 GHz $\leq 5^\circ$
- High power handling
- Temperature phase stability $< 500\text{ppm}(-40^\circ\text{C to }+85^\circ\text{C})$
- Longer flex life with stranded center conductor

Cable Construction



| No. | Construction | Size (mm) | Materials |
|-----|------------------|-----------|-------------------------------------|
| 1 | Center Conductor | 2.30 | Stranded silver plated copper |
| 2 | Dielectric | 6.00 | Low density PTFE |
| 3 | Outer Conductor | 6.33 | Silver plated copper strip wrapping |
| 4 | Interlayer | 6.60 | PTFE |
| 5 | Outer Shield | 7.05 | Silver plated copper wire braiding |
| 6 | Jacket | 7.70 | FEP |



Electrical

| | |
|--------------------------------|---|
| Frequency | DC-18 GHz |
| Impedance | 50 Ω |
| Velocity of Propagation | 83% |
| Shielding Effectiveness | $> 90\text{ dB}$ |
| Withstanding Voltage | 2500 V |
| *Mechanical Phase Stability | $< \pm 5^\circ$ |
| Amplitude Stability vs Shaking | $< \pm 0.15\text{dB}$ |
| Temp Phase Stability | $< 500\text{ppm}(-40^\circ\text{C to }+85^\circ\text{C})$ |

* Wrapped 360° around a 80mm radius mandrel.

Mechanical & Environmental

| | |
|------------------------------|------------------------------|
| Min. Bending Radius Static | 40mm |
| Min. Bending Radius Repeated | 80mm |
| Weight | 124g/m |
| Temperature(Operation) | $-55 \sim 125^\circ\text{C}$ |
| Temperature(Storage) | $-65 \sim 125^\circ\text{C}$ |

Attenuation(Typical@25°C&VSWR=1.0) & Power(VSWR=1.0; 40°C; Sea level)

| | | | | | | | | | | | |
|---------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Frequency MHz | 300 | 1000 | 2000 | 3000 | 6000 | 8000 | 10000 | 12000 | 14000 | 16000 | 18000 |
| dB/100 Meter | 9.8 | 18.1 | 25.9 | 31.9 | 45.8 | 53.4 | 60.1 | 66.2 | 71.9 | 77.3 | 82.4 |
| Avg. Power kW | 3.340 | 1.811 | 1.269 | 1.029 | 0.717 | 0.616 | 0.547 | 0.496 | 0.457 | 0.425 | 0.399 |

Attenuation at any frequency = $[0.561347 \times \text{SQRT}(\text{FMHz})] + [0.000393 \times \text{FMHz}]$

Available connectors

| Cable P/N | Connectors | Gender | Orientation | Mounting | Max Freq.(GHz) | VSWR Max |
|-----------|------------|--------|-------------|----------|----------------|----------|
| UF800 | SMA | M/F | Straight | Standard | 18 | 1.3 |
| UF800 | SMA | Male | Right Angle | Standard | 18 | 1.35 |
| UF800 | N | M/F | Straight | Standard | 18 | 1.3 |
| UF800 | N | Male | Right Angle | Standard | 18 | 1.35 |
| UF800 | TNC | M/F | Straight | Standard | 18 | 1.35 |
| UF800 | TNC | Male | Right Angle | Standard | 18 | 1.4 |
| UF800 | DIN 7/16 | Male | Straight | Standard | 6 | 1.3 |

Other connectors available upon request.