

**Flexible Coaxial Cable
50 Ω - PTFE - Single Shielding**
RG-178B/U

Material And Diameter

| Connector parts | Material | Diameter |
|-----------------|---|----------|
| Inner Conductor | Steel, Copper + Silver plated (Stranded) | 0.31 mm |
| Dielectric | PTFE (Polytetrafluoroethylene) | 0.84 mm |
| Outer Shield | Copper, Silver plated | 1.35 mm |
| Jacket | FEP (Fluorinated ethylene propylene) | 1.80 mm |

Electrical Data

| | |
|--------------------------------|----------------------------|
| Impedance | 50 Ω ± 2 |
| Frequency | DC to 6 GHz |
| Capacitance | 95 pF/m |
| Velocity of signal propagation | 70 % |
| Signal delay | 4.7 ns/m |
| Insulation resistance | ≥ 1 × 10 ⁸ MΩ/m |
| Screening effectiveness | ≥ 40 dB (up to 1 GHz) |
| Operating voltage | ≤ 0.5 kVrms (@ sea level) |

Mechanical Data

| | |
|---------------------|-----------------------------------|
| Weight | 8.0 g/m |
| Min. bending radius | 10 mm (Static) 27 mm (Dynamic) |

Environmental Data

| | |
|--------------------------|-----------------|
| Temperature range | -65°C to +165°C |
| Installation temperature | -20°C to +60°C |
| RoHS (2011/65/EU) | compliant |

Typical Attenuation

| Frequency (GHz) | Typical Attenuation (dB/m) @ 25 °C sea level | Typical Attenuation (dB/ft) @ 25 °C sea level | Max. CW power (Watt) @ 40 °C sea level |
|-----------------|---|--|---|
| 0.1 | 0.58 | 0.18 | 225 |
| 0.4 | 1.05 | 0.32 | 115 |
| 0.9 | 1.58 | 0.48 | 72 |
| 1 | 1.68 | 0.51 | 68 |
| 1.8 | 2.24 | 0.68 | 47 |
| 2.4 | 2.59 | 0.79 | 40 |
| 3 | 2.91 | 0.89 | 34 |
| 5 | 3.76 | 1.15 | 26 |
| 6 | 4.13 | 1.26 | 23 |