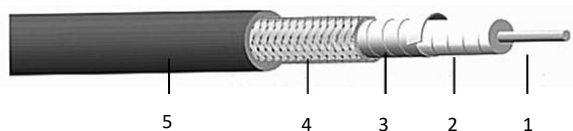


## Ultra-Low Loss Phase Stable Coaxial RF Cable

Ultra Low Loss Phase Stable is a 50  $\Omega$  coaxial cable designed for reliable RF signal transmission with enhanced shielding effectiveness against interference operated upto 30GHz. It features a silver-coated copper conductor, solid polyethylene dielectric, high-coverage shielding, and a durable grey FEP jacket.



Part No: TE-RFC-ULLPS-D4.80

### Cable Structure

|   | Layer                   | Material    | Diameter |
|---|-------------------------|-------------|----------|
| 1 | Inner Conductor         | SCC         | 1.40 mm  |
| 2 | Insulation (Dielectric) | LD PTFE     | 3.80 mm  |
| 3 | Outer Conductor         | SCC Foil    | 4.00 mm  |
| 4 | Outer Shield            | Braided SCC | 4.40 mm  |
| 5 | Jacket                  | Grey FEP    | 4.80 mm  |

### Physical Characteristics

|                               |         |            |                        |               |
|-------------------------------|---------|------------|------------------------|---------------|
| Cable Outer Dia.              | 4.80 mm | 0.189 inch |                        |               |
| Weight                        | 52 g/m  |            | Durability             | > 5000        |
| Bending Radius (Installation) | 24 mm   |            | Working Temp.          | -55°C~+165 °C |
| Bending Radius (Repeated)     | 48 mm   |            | Armor Stress Tolerance | 160N/25mm     |

### Electrical Characteristics

|                         |         |                         |         |                     |                        |
|-------------------------|---------|-------------------------|---------|---------------------|------------------------|
| Impedance               | 50 ohms | Cut-off Frequency       | 30 GHz  | Operating Frequency | 27 GHz                 |
| Velocity of Propagation | 83%     | Shielding Effectiveness | > 90 dB | Bending Phase       | $\pm 5^\circ$ @26.5GHz |
| VRMS                    | 1500 V  | Temp. Phase             | 600 PPM | Mech. Phase         | 10 @26.5GHz            |

| Frequency (MHz) | Attenuation (dB/100m) | Power Handling (Avg. kW) | Frequency (MHz) | Attenuation (dB/100m) | Power Handling (W) |
|-----------------|-----------------------|--------------------------|-----------------|-----------------------|--------------------|
| 300             | 12.9                  | 1.608                    | 8000            | 68.8                  | 0.301              |
| 1000            | 23.7                  | 0.875                    | 12000           | 85.0                  | 0.244              |
| 2000            | 33.7                  | 0.615                    | 18000           | 105.2                 | 0.197              |
| 4000            | 48.1                  | 0.431                    | 26500           | 129.3                 | 0.160              |
| 6000            | 59.2                  | 0.350                    | 31000           | 140.6                 | 0.147              |

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