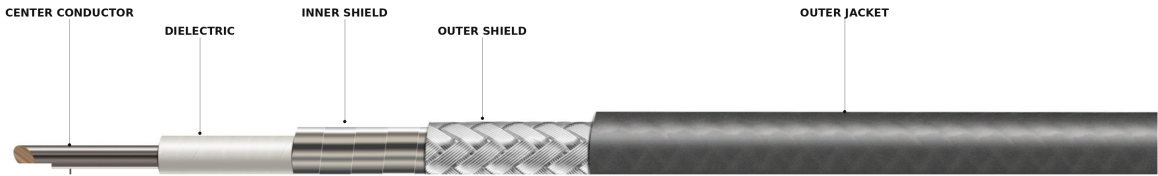


KL-550A — Low-Loss Phase-Stable Coaxial Cable  
Low-Loss, Phase-Stable Coaxial Cable — Flexible Construction



Structure & Materials

| Element          | Dimension (mm) | Material                           |
|------------------|----------------|------------------------------------|
| Center Conductor | 1.60           | Silver-Plated Copper               |
| Dielectric       | 4.30           | Low-Density PTFE                   |
| Inner Shield     | 4.50           | Silver-Plated Copper Tape          |
| Outer Shield     | 5.10           | Silver-Plated Copper Braid         |
| Outer Jacket     | 5.60           | Gray PFA (Custom Colors Available) |

Electrical Properties

| Parameter                       | Value       |
|---------------------------------|-------------|
| Operating Frequency             | DC – 18 GHz |
| Cutoff Frequency                | 26.5 GHz    |
| Characteristic Impedance        | 50 Ω        |
| Velocity of Propagation         | 83%         |
| Shielding Effectiveness         | > 90 dB     |
| Dielectric Withstanding Voltage | 2000 V DC   |

Attenuation & Power Handling (Typical, 25°C / 40°C)

| Frequency (MHz)       | 1000  | 2000  | 3000  | 6000  | 8000  | 10000 | 12400 | 16000 | 18000 |
|-----------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Attenuation (dB/100m) | 22.3  | 31.6  | 38.8  | 55.0  | 63.6  | 71.2  | 79.5  | 90.5  | 96.1  |
| Avg. Power (kW)       | 1.233 | 0.870 | 0.709 | 0.500 | 0.432 | 0.386 | 0.346 | 0.304 | 0.286 |

Mechanical & Environmental

| Static Bend Radius | Dynamic Bend Radius | Weight     | Operating Temperature |
|--------------------|---------------------|------------|-----------------------|
| 28 mm              | 56 mm               | 0.075 kg/m | -55°C ~ +165°C        |

Features & Benefits

- Phase-stable across temperature (<750 ppm, -55°C to +85°C)
- Low insertion loss
- High power handling
- Low PIM (-155 dBc)
- Lightweight construction

Typical Applications

- Phased-array radar
- Airborne electronics
- Electronic warfare (EW)
- Any application demanding tight loss and phase tolerance