

KL-750AW — Solid-Type Phase-Stable Coaxial Cable

Solid-Type, Low-Loss, Phase-Stable Coaxial Cable — Reinforced Construction



Structure & Materials

Element	Dimension (mm)	Material
Center Conductor	2.10	Silver-Plated Copper
Dielectric	5.70	Low-Density PTFE
Inner Shield	5.95	Silver-Plated Copper Tape
Middle Layer	6.20	Low-Density PTFE (Reinforcement)
Outer Shield	6.80	Silver-Plated Copper Braid
Outer Jacket	7.60	Gray/Green PFA or FEP (Custom Colors Available)

Electrical Properties

Parameter	Value
Operating Frequency	DC – 18 GHz
Cutoff Frequency	20 GHz
Characteristic Impedance	50 Ω
Velocity of Propagation	83%
Shielding Effectiveness	> 90 dB
Dielectric Withstanding Voltage	2500 V DC

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

Frequency (MHz)	1000	2000	3000	6000	8000	10000	12400	16000	18000
Attenuation (dB/100m)	16.7	23.7	29.1	41.4	47.9	53.7	59.9	68.2	72.5
Avg. Power (kW)	1.740	1.227	1.000	0.704	0.608	0.543	0.487	0.427	0.402

Mechanical & Environmental

Static Bend Radius	Dynamic Bend Radius	Weight	Operating Temperature
38 mm	76 mm	0.118 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