

KL-220A — Low-Loss Phase-Stable Coaxial Cable

Low-Loss, Phase-Stable Coaxial Cable — Flexible Construction



Structure & Materials

Element	Dimension (mm)	Material
Center Conductor	0.50	Silver-Plated Copper
Dielectric	1.38	Low-Density PTFE
Inner Shield	1.54	Silver-Plated Copper Tape
Outer Shield	1.95	Silver-Plated Copper Braid
Outer Jacket	2.20	Gray PFA (Custom Colors Available)

Electrical Properties

Parameter	Value
Operating Frequency	DC – 40 GHz
Cutoff Frequency	83 GHz
Characteristic Impedance	50 Ω
Velocity of Propagation	81%
Shielding Effectiveness	> 90 dB
Dielectric Withstanding Voltage	1000 V DC

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

Frequency (MHz)	1000	2000	3000	6000	8000	10000	12400	18000	26500	40000
Attenuation (dB/100m)	63.70	90.80	111.88	160.37	186.49	209.79	235.16	287.06	354.00	444.01
Avg. Power (kW)	0.110	0.077	0.063	0.044	0.038	0.033	0.030	0.024	0.020	0.016

Mechanical & Environmental

Static Bend Radius	Dynamic Bend Radius	Weight	Operating Temperature
11 mm	22 mm	0.016 kg/m	–55°C ~ +125°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