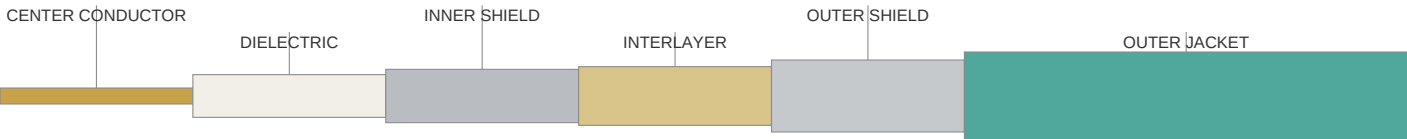


KL-686A — Low-Loss Coaxial Cable

Low-Loss, Extended-Temperature Coaxial Cable — Flexible Construction



Structure & Materials

Element	Dimension (mm)	Material
Center Conductor	1.73	Silver-Plated Copper, 7/.023" Stranded
Dielectric	4.7	Expanded PTFE Tape
Inner Shield	4.95	Silver-Plated Copper Strip (Flat Braid)
Interlayer	5.08	Aluminum-Polyester Tape (Metallized Shield)
Outer Shield	5.59	Silver-Plated Copper Braid (Round Wire)
Outer Jacket	6.86	FEP (Custom Colors Available)

Electrical Properties

Parameter	Value
Operating Frequency	DC – 18 GHz
Characteristic Impedance	50 Ω
Velocity of Propagation	80%
Shielding Effectiveness	> 95 dB

Attenuation (Typical, 25°C)

Frequency (MHz)	400	1000	2000	3000	5000	10000	18000
Attenuation (dB/100m)	14.1	22.0	31.5	39.4	51.8	73.8	102.0

Mechanical & Environmental

Static Bend Radius	Weight	Operating Temperature	Peak Power Rating
35.56 mm	0.1042 kg/m	–55°C ~ +200°C	24.0 kW

Features & Benefits

- Low attenuation — 20–35% below comparable mil-spec cables of similar size
- Extended operating temperature range (–55°C to +200°C)
- High shielding effectiveness (> 95 dB)
- Thermally stable expanded-PTFE dielectric — low phase shift vs. temperature

Typical Applications

- Phased-array & airborne radar
- Electronic warfare (EW) systems
- Military communication systems
- High-temperature RF environments