

LC & LT Series Connectors

Aptiv's LC & LT Series connectors are heavy-duty, threaded coaxial RF connectors for use in medium- to high-power applications. The LC Series is used for larger cables and are commonly used in broadcast, communications, test equipment, and industrial heating applications. The LT Series is used for military and specialized high-power radar and industrial applications. Both series are rugged, weather-resistant connectors which are ideal for rugged and hostile environments. The LC & LT Series offer the benefits of heavy-duty construction and reliable high-power performance.



KEY FEATURES & BENEFITS

- High Power – Handles significant RF power for broadcast, antennas, and industrial equipment
- Secure Coupling – Threaded design ensures vibration-proof, long-lasting connections
- Voltage Safe – Prevents arcing at high voltages
- 50 Ω Standard – Compatible with most RF systems
- Durable Construction – Heavy-duty brass or stainless steel for strength and corrosion resistance
- Environmentally Resilient – Withstands moisture, dust, and temperature extremes

PRODUCT SPECIFICATIONS

Electrical Properties*	
Impedance	50 Ohms
Frequency Range	DC to 4 GHz (specialized versions may be higher)
Voltage Rating	Typically 1500-5000 VRMS (max.)
Dielectric Withstanding Voltage	5000-10000 VRMS (min.)
Contact Resistance	Center Contact: $\leq 1.0 \text{ m}\Omega$ (typical) Outer Contact: $\leq 0.5 \text{ m}\Omega$ (typical)
Insulation Resistance	$\geq 5000 \text{ M}\Omega$
VSWR (Voltage Standing Wave Ratio)	Typically ≤ 1.30 @ 3 GHz
Insertion Loss	Low, typically $\leq 0.1 \text{ dB}$ @ 3 GHz.
PIM (Passive Intermodulation)	While not as stringent as 7/16 DIN, good PIM performance is generally maintained due to robust design.

*reference website for specific part number specifications

PRODUCT SPECIFICATIONS CONTD.

Environmental Properties*	
Temperature Range	-65°C to +165°C (standard)
Thermal Shock	MIL-STD-202, Method 107, Test Condition B.
Vibration	MIL-STD-202, Method 204, Test Condition B or D.
Shock	MIL-STD-202, Method 213, Test Condition I.
Moisture Resistance	MIL-STD-202, Method 106.
Corrosion (Salt Fog)	MIL-STD-202, Method 101, Test Condition B (48 hours).
Durability	Engineered for reliable performance in harsh industrial, military, and outdoor environments, ensuring integrity against physical stress and environmental factors.

*reference website for specific part number specifications

PRODUCT SPECIFICATIONS CONTD.

Mechanical Properties*	
Coupling Mechanism	Threaded Specific thread sizes will vary by series and manufacturer (e.g., larger than N-Type threads).
Mating Cycles	≥ 500 cycles (standard); built for long service life
Cable Retention	Designed for robust cable attachment, accommodating larger diameter cables (often hardline or semi-rigid coaxial cables) with clamp or solder termination.
Body Material	Brass or Stainless Steel (typically nickel, silver, or tri-metal plated).
Center Contact Material	Brass, Beryllium Copper, or Phosphor Bronze (typically silver or gold plated).
Dielectric/Insulator Material	PTFE (Polytetrafluoroethylene) for excellent electrical properties and temperature stability.
Interface Dimensions	Generally conform to military or industry standards specific to each series, though less universally standardized than more common connectors.

*reference website for specific part number specifications