

E15-545

Specifications

Attribute	Value
MIL-SPEC Technical Data Sheet: E15-545 - 1. Product Overview & Classification	
Part Number	E15-545
Manufacturer Origin	Aircraft Radio Corporation (ARC) / Historical Military Avionics
Connector Type	Circular Military Interconnect (Plugs/Receptacles)
Total Contacts	5 Pin positions
Coupling Mechanism	Threaded coupling nut with single key/keyway polarization
Primary Application	Airborne Radio Communications (AN/ARC series), legacy defense electronics, auxiliary power, and control signal routing.
2. Materials & Construction Specifications	
Shell Material	High-grade die-cast aluminum alloy (alternative: stainless steel base)
Shell Plating	Olive Drab Cadmium over nickel or plain anodized finish
Insulator Insert	Resilient polychloroprene / synthetic rubber (or legacy phenolic resin)
Contact Material	Copper alloy with premium silver or gold plating over nickel
Contact Termination	Solder pot cup
3. Electrical Performance Ratings	
Operating Voltage	Up to 500V AC (RMS) / 700V DC at sea level (consistent with Service Rating A)
Current Rating	13 Amps maximum per pin (standard size #16 contacts)
Contact Resistance	< 50 milliohms
Insulation Resistance	5,000 Megohms minimum (at 500V DC)
4. Environmental & Mechanical Limits	
Operating Temperature Range	-55°C to +125°C
Vibration Resistance	10 Hz to 2,000 Hz at 20 g's of sinusoidal displacement
Shock Test	Up to 100 g's with zero structural or electrical discontinuity
Durability	500 mating and unmating cycles minimum
Corrosion/Moisture Resistance	48-hour salt spray exposure survival; completely environmental and splash resistant when properly mated.