RF, Microwave, and mmWave Interconnects Series 795 High-Density Multi-Port RF Rectangular Connectors



General Information

Specifications

DESCRIPTION	REQUIREMENT	PROCEDURE
Insulation resistance	Not applicable (connector is one piece aluminum)	EIA-364-21
Dielectric withstanding voltage	Not applicable (connector is one piece aluminum)	EIA-364-20
Shell-to-shell resistance (with ground spring)	2.5 millivolt maximum	EIA-364-83
Shielding effectiveness	Frequency Attenuation dB 100 75 1000 50 3000 44 6000 38 10000 35	EIA-364-66
Ingress protection	IP67 rating	IEC-60529
Vibration, sine	No discontinuity of greater than 1 microseconds, no cracking, breaking or loosening of parts.	EIA-364-28 Test Condition IV 100 milliamp test current, 10- 2,000 Hz 20 g, 196 m/s2
Vibration, random	No discontinuity of greater than 1 microseconds, no cracking, breaking or loosening of parts, plug shall not become disengaged from receptacle.	364-28 Test Condition V Letter E 100 milliamp test current, 50- 2,000 Hz 16.91 g rms, 8 hrs. each axis
Mechanical shock	No discontinuity of greater than 1 microsecond, no cracking, breaking or loosening of parts, plug shall not become disengaged from receptacle.	EIA-364-27 Condition D 3 shocks X 3 axes X 2 directions = 18 shocks 2941 m/s2 (300 g's), 3 ms, half-sine
Thermal shock	No mechanical damage or loosening of parts. Following thermal shock, connector shall meet contact resistance, DWV, insulation resistance and shell-to-shell resistance requirements	EIA-364-32 Test Condition IV 5 cycles consisting of -65° C 30 minutes, +25° C 5 minutes max., +150° C 30 minutes, +25° C 5 minutes max.
Humidity	No deterioration which will adversely affect the connector. 100 megohms minimum insulation resistance during the final cycle. Following the recovery period, connectors shall meet contact resistance, shell-to-shell resistance and DWV requirements.	EIA-364-31 Method IV 80-98% RH, 10 cycles (10 days), +25° C to +65° C Step 7b vibration deleted. 24 hour recovery period.
Altitude - Low Temperature	5000 megohms minimum insulation resistance.	EIA-364-105, -65° C, 100,000 feet (11 mbar) Wired, mated pairs
Mechanical Durability, at Ambient Temperature	500 cycles	EIA-364-09
Corrosion (Salt Mist)	No exposure of base metal. Connectors shall meet DWV and contact resistance requirements following the test.	EIA-364-26, 5% salt solution, 35° Code M: electroless nickel 48 hours Code MT: nickel-PTFE 500 hours
Impact, Cable Connectors	No impairment of function. Connector shall meet contact resistance, insulation resistance and waterproof sealing.	EIA-364-42, 1 meter, 8 drops
Fluid Immersion	No damage from immersion in various fuels and oils. Connector shall meet mating/unmating force and dielectric withstanding voltage.	EIA-364-10
Altitude Immersion	No evidence of moisture on connector interface or contacts. Connector shall meet dielectric withstanding voltage.	EIA-364-03 75,000 feet simulated altitude
Contact retention, Size #8 BMB coax contacts	25 lbs. minimum	EIA-364-29
Magnetic permeability	2 mu maximum	EIA-364-54
Thermal vacuum outgassing	All nonmetallic materials shall not release greater than 1.0 percent total mass loss (TML) and 0.1 percent collected volatile condensable material (CVCM)	ASTM E595 Test to be performed following 24 hours vacuum bakeout at +125 °C, 10-6 Torr.