

SPECIFICATION AND PERFORMANCE

Series	321A-331251	File	321A-331251_SPEC_1	Date	2019/10/25
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Scope:

This specification covers the requirements for product performance, test methods and quality assurance provisions of RF TYPE I

Performance and Descriptions:

The product is designed to meet the electrical, mechanical and environmental performance requirements specification. Unless otherwise specified, all tests are performed at ambient environmental conditions.

RoHS:

All material in according with the RoHS environment related substances list controlled.

MATERIALS		
NO.	PART NAME	DESCRIPTION
1	INSULATOR	Housing: LCP UL94V-0 Natural
2	CONTACT	Brass, Gold flash on contact area, 50" min. nickel under plating over all
3	GROUND	Phosphor Bronze, Gold flash on contact area, 50" min. nickel under plating over all

ELECTRICAL		
Item	Requirement	Test Condition
Contact Resistance	Ground: Initial : 10mΩ Max. Final : 15mΩ Max. Inner : Initial : 20mΩ Max. Final : 25mΩ Max	Subject mated contacts assembled in housing to 20mV Max. open circuit at 10mA Max. EIA-364-06B
Insulation Resistance	Initial : 500M Ω Min. Final : 100M Ω Min.	Impressed voltage 100V DC for 1 minute. Test between adjacent circuits of

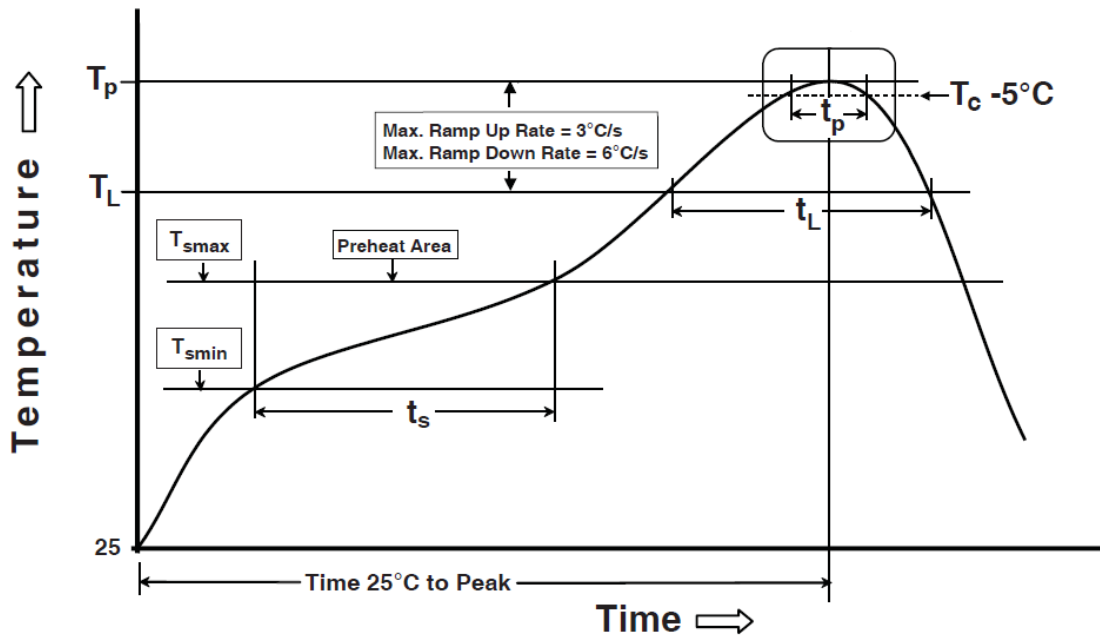
		mated connector. EIA-364-21C
Dielectric Withstanding Voltage	No creeping discharge or flashover shall occur.	200V AC for 1 minute. Test between adjacent circuits of mated connector. Current leakage : 0.5mA Max.
VSWR	100MHz to 3GHz : 1.3 Max. 3GHz to 6GHz : 1.4 Max.	Mate the connector and SMA connector together, then measure the VSWR by the network analyzer. EIA-364-108

MECHANICAL		
Item	Requirement	Test Condition
Durability	No physical damage and meet	Operation Speed : 2~3 cycles / min. Durability Cycles : 30 Cycles. EIA-364-09C
Vibration	No momentary disconnections of 1 micro-sec/min. And meet	Mated the connector, then Impressed the 100mA DC. Frequency : 10Hz→100Hz→10Hz / approx 20 minutes. Half amplitude, peak value of acceleration : 1.5mm or 59m/s ² (6G). Direction : 3 mutually perpendicular directions. Cycle : 5 cycles for each direction. EIA-364-28E
Mechanical Shock	No momentary disconnections of 1 micro-sec/min. And meet	Accelerate Velocity : 735m/s (75G) Waveform : Half-sine shock plus. Duration : 11m sec. Direct Current : 1m A Direction : In ±X , ±Y and ±Z axes. Cycle : 3 cycles for each direction, totally 18 cycles. EIA-364-27B

ENVIRONMENTAL		
Item	Requirement	Test Condition
Thermal Shock	No physical damage and meet	Mated Connector and apply the following test condition. Temperature : a) -40°C(30 minutes), +25°C (5 minutes) b) +85°C(30 minutes), +25°C (5 minutes) Cycle : 5 cycles
Humidity	No physical damage and meet	Mated Connector and apply the following test condition. Temperature : +40±2°C Humidity : 90~95% RH Duration : 96 Hours
Temperature Life	No physical damage and meet	Mated Connector and apply the following test condition. Temperature : +85°C Duration : 96 Hours EIA-364-17B
Salt Spray	No physical damage and detrimental corrosion. Meet	Mated Connector and apply the following test condition. Temperature : +35±2°C Salt water density : 5±1% Duration : 24 hours EIA-364-26B
Resistance to Cold	No physical damage and meet	Mated Connector and apply the following test condition. Temperature : -40±2°C Duration : 96 hours

SOLDER ABILITY		
Item	Requirement	Test Condition
Solder Ability	Dipped surface shall be wet with solder : 95% Min.	Dip the solder pin of the connector in solder bath. Temperature : +245±5°C Duration : 5±0.5 sec.
Soldering Heat Resistance	No physical damage.	Lead free reflow up to 260°C peak for 10 sec.

Reflow Profile



Preheating temperature: $150 \sim 200^\circ C$, 60~120 seconds
 Liquidus temperature (T_L): $217^\circ C$, 60~150 seconds
 Peak temperature: $260^\circ C$
 Time within $5^\circ C$ of peak temperature (T_c): $255^\circ C$, 30seconds