立威科技股份有限公司 Attend Technology Inc.
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SPECIFICATION AND PERFORMANCE

Series	115U-A103	File	115U-A103_SPEC_1	Date	2021/10/20

Scope:

This specification covers the requirements for product performance, test methods and quality assurance provisions of **115U-A103**

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	HOUSING	LCP, UL94V-0, Black
2	SLDER	LCP, UL94V-0, Black
3	CONTACT	C5210, G/F on contact & solder area, under plating nickel plating over all
4	SHELL	SUS304, solder area: G/F, under plating nickel plating over all
5	LINK	SUS304
6	SPRING	SWP-B

RATING	
Rated Voltage	10 VDC
Rated Current	0.5 A per pin
Operating Temperature	-40 °C to 85 °C
Durability	5000 cycles

ELECTRICAL		
Item	**Requirement**	**Test Condition**
Low Level Contact Resistance	100 m Ohm Max	Solder connectors to PCB and insert dummy card into shell, measure by applying closed circuit current of 10mA maximum at open circuit voltage of 20mV (max). (EIA-364-23)
Dielectric Withstanding Voltage	No Broken	500V AC (rms.) between two adjacent for 1 minute. (EIA-364-20)
Insulation Resistance	1000 MΩ min. initial	Impressed voltage 250V DC for 1 minute. Test between adjacent circuit. (EIA364-21)

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MECHANICAL		
Item	**Requirement**	**Test Condition**
Card Insertion Force	10N Max	Operation Speed： 25 mm/min. Measure the force required to mate connector. (EIA-364-13B)
Durability	Max. Change from initial contact resistance 40mΩ max. no physical damage to connector shall occur	Cycle rate: 400 to 600 cycles per hour No. of cycle: 5,000 cycles. (EIA 364-09)
Vibration	No electrical discontinuity greater than 0.1or 1μsec shall occur.	Frequency Range: 10-55-10 Total Amplitude: 1.52 mm p-p or 9.81m/sec^2. Duration: 2 hours tree axes(6 hours in total) (EIA364-28)
Mechanical Shock	No electrical discontinuity greater than 0.1or 1μsec shall occur.	Accelerated Velocity: 50 G (490 m/sec^2) Waveform: Semi Sine Duration: 11 m sec. No of Shocks: 6/dir., 3 axis,(total of 18 Shocks) (EIA364-27)

ENVIRONMENTAL		
Item	**Requirement**	**Test Condition**
Thermal Shock	Max. Change from initial contact Resistance 40mΩ Max No physical damage to connector shall occur.	Temperature Range: -55 to 85 ℃ No. of Cycles: 5 cycles for 30 minutes (EIA364-32)
Humidity-Thermal Cycling	Max. Change from initial contact Resistance 40mΩ Max Insulation Resistance: 1000 MΩ Min. initial 100 MΩ Min. after test No physical damage to connector shall occur.	Ambient Temp.: 25 to 65 ℃ Relative humidity: 90 to 95 % Duration: 10 cycles (EIA364-31)
Temperature Life	Max. Change from initial contact Resistance 40mΩ Max No physical damage to connector shall occur.	Chamber Temperature: 85±2 ℃ Duration: 96 hours (EIA364-17)
Salt Spray Test	Max. Change from initial contact Resistance 40mΩ Max No physical damage to connector shall occur.	Salt Solution: 5±1.0% Length of Test: 12 hours Dummy card engaged during test (EIA364-26)

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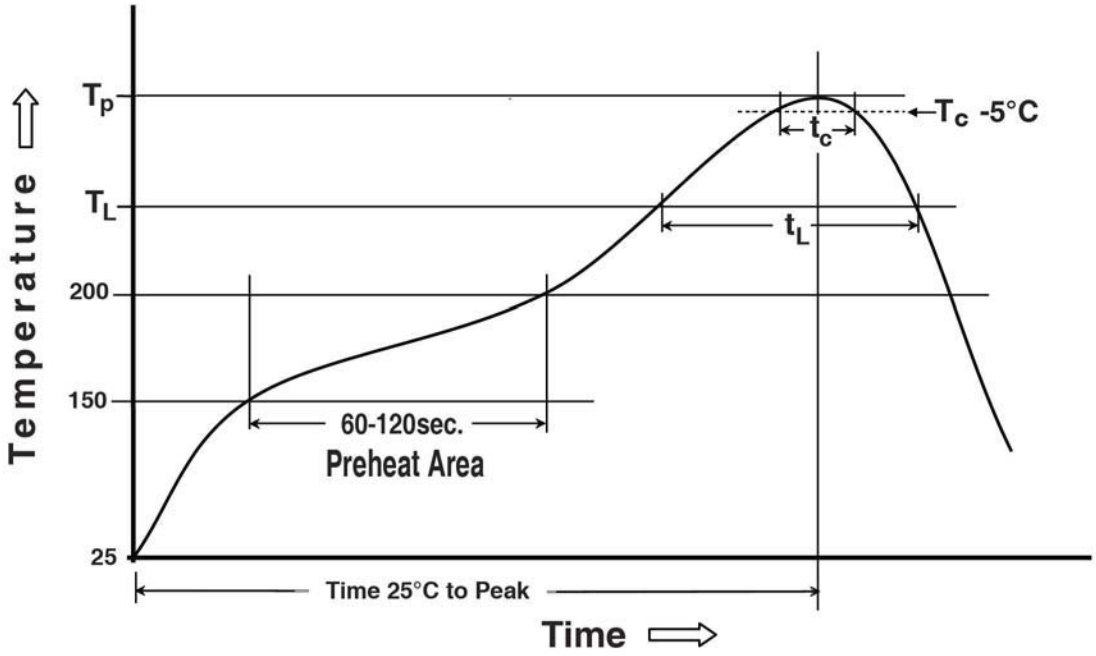
SOLDER ABILITY		
Item	**Requirement**	**Test Condition**
Solder ability	Wet Solder Coverage: 95% Min.	Solder Temperature: 245±3℃ Immersion Duration: 5 ±0.5 sec. (J-STD-002B)
Resistance to soldering heat	No melting, cracks or functional damage allowed	Preheating temperature: 150 ~ 200°C, 60~120 seconds Liquidus temperature (TL): 217°C, 60~150 seconds Peak temperature: 260°C Time within 5 °C of peak temperature (Tc): 255°C, 30seconds

Reflow Profile



Preheating temperature: 150 ~ 200°C, 60~120 seconds
Liquidus temperature (TL): 217°C, 60~150 seconds
Peak temperature: 260°C
Time within 5 °C of peak temperature (Tc): 255°C, 30seconds