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

Series	115A Series	File	115A-Series_spec_5	Date	2022/03/04

Scope:

This specification covers the requirements for product performance, test methods and quality assurance provisions of below table:

P/N	DESCRIPTION
115A-BDA0-R01	SIM Card Socket , Push-Push Type, 8+2 Pin, 10u", Reel, w/switch, (w/Logo)
115A-ADA0-R02	SIM Card Socket , Push-Push Type, 6+2 Pin, 10u", Reel, w/switch, (w/Logo)
115A-ADAA-R02	SIM Card Socket , Push-Push Type, 6+2 Pin, 10u", Reel, w/o Peg, w/switch, (w/Logo)

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	CONTACT	Phosphor Bronze, Gold plating on contact area, 120u" min. Tin plating on solder tails, under plating 50u" min. Nickel
3	SHELL	SUS304, Gold plating on solder tails, under plating 50u" min. Nickel
4	SLIDER	LCP, UL94V-0, Black
5	CRANK	SUS304
6	SPRING	SWP

RATING	
Rated Voltage	30V AC/DC
Rated Current	0.5A per pin
Operating Temperature	-40°C to +85°C
Storage Temperature	-40°C to +85°C
Durability	10,000

ELECTRICAL		
Item	Requirement	Test Condition
Contact Resistance (Low Level)	100 mΩ Maximum (Initial) ΔR = 40 mΩ Max.	Subject mated contacts assembled in housing to 20 mV Max. Open circuit at 10 mA.
Insulation Resistance	1000 MΩ Min. initial 100 MΩ Min. after test	Impressed voltage 500VD.C. for 1minute. Test between adjacent circuit.

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		EIA-364,TP-21
Dielectric Withstanding Voltage	No creeping discharge nor Flashover shall occur. Current leakage: 1 mA Max.	500 V for 1 minute. Test between adjacent circuit. EIA-364,TP-20
Temperature Rise	30 °C Max. under loaded rating current	The contacts shall be wired in series and apply rated current. Measure the temp. rising on contact.

MECHANICAL		
Item	**Requirement**	**Test Condition**
Durability (Office Environment)	100 mΩ Maximum (Initial) ΔR = 40 mΩ Max.	Cycle Rate: 400 to 600 cycles per hour. No. of Cycles: 10,000 cycles. EIA- 364,TP-09
Durability (Harsh Environment)	100 mΩ Maximum (Initial) ΔR = 40 mΩ Max.	Cycle Rate: 400 to 600 cycles per hour. 1. Mate/Unmating : 1,000 cycles 2. Dump Heat 1 cycles 3. Mate/Unmating: 1,000 cycles 4. Dump Heat : 1 cycles 5. Mate/Unmating : 3,000 cycles 6. Dump Heat 1 cycles 7. H2S 96 hours
Contact Retention Force	1.0N Min. (Individual Contact)	Measure the contact retention force at 25.0 mm/min. EIA-364,TP-29
Total Insertion Force	0.714Kgf (7 N) Max.	Measure the SIM card insertion force at 25 .0mm/min. EIA-364,TP-13
Total withdrawal Force when SIM card is mated	0.026Kgf (0.25) N Min.	Measure the mated SIM card extraction force at 25 .0 mm/min. EIA-364,TP-13
Card Reverse Insertion	No electrical connection and Physical damage to connector. Maintain push-and-eject function.	Test speed: 25 mm/ min. Mating device: Dummy SIM card. Reference: EIA-364,TP-3
Vibration (Low Frequency)	No electrical discontinuity greater than 100 nsec. Shall occur.	Frequency Range: 10-55-10 Total Amplitude: 1.52 mm pp or 98.1m/s Duration: 2 hrs tree axes (6 hrs in total) EIA-364,TP-28
Physical Shock	No electrical discontinuity greater than 100 nsec. Shall occur.	Accelerated Velocity: 50G (490s/m^2) Waveform: Semi Sine Duration: 11m sec. No of Shocks: 3/dir., 3 axis,(18 in total), EIA-364,TP-27
Retention to PC board	1.02 kgf (10 N) Mim.	Apply force to connector in un-mating direction. Reference test procedure: EIA364, TP-13

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ENVIRONMENTAL		
Item	**Requirement**	**Test Condition**
Humidity-Thermal Cycling	1,000 MΩ(Initial) 100 MΩ(After Test) ΔR = 40 mΩ Max.	Ambient Temp.: 40±2°C Relative humidity: 90 to 95% Duration: 10 cycles (Dummy engaged) EIA-364,TP-31
Thermal Shock	1,000 MΩ(Initial) 100 MΩ(After Test) ΔR = 40 mΩ Max.	Temperature Range: 55 to 85°C No. of Cycles: 5 cycles for 60 minutes Dummy card engaged during test EIA-364,TP-32
Dump Heat	ΔR = 40 mΩ Max.	Ambient Temp.: 40±2°C Relative humidity: 90 to 95% Duration: 96 hours (Dummy engaged) EIA-364,TP-31
Temperature Life	ΔR = 40 mΩ Max.	Chamber Temperature: 85±3°C Duration: 250 hours Dummy card engaged during test EIA-364,TP-17
Low Temperature Resistance	ΔR = 40 mΩ Max.	Chamber Temperature: -40±3°C Duration: 96 hours Dummy card engaged during test EIA-364,TP-59
Salt Spray Test	100 mΩ Maximum (Initial) ΔR = 40 mΩ Max.	Salt Solution: 5±1% Length of Test: 48 hours Dummy card engaged during the test EIA-364,TP-26

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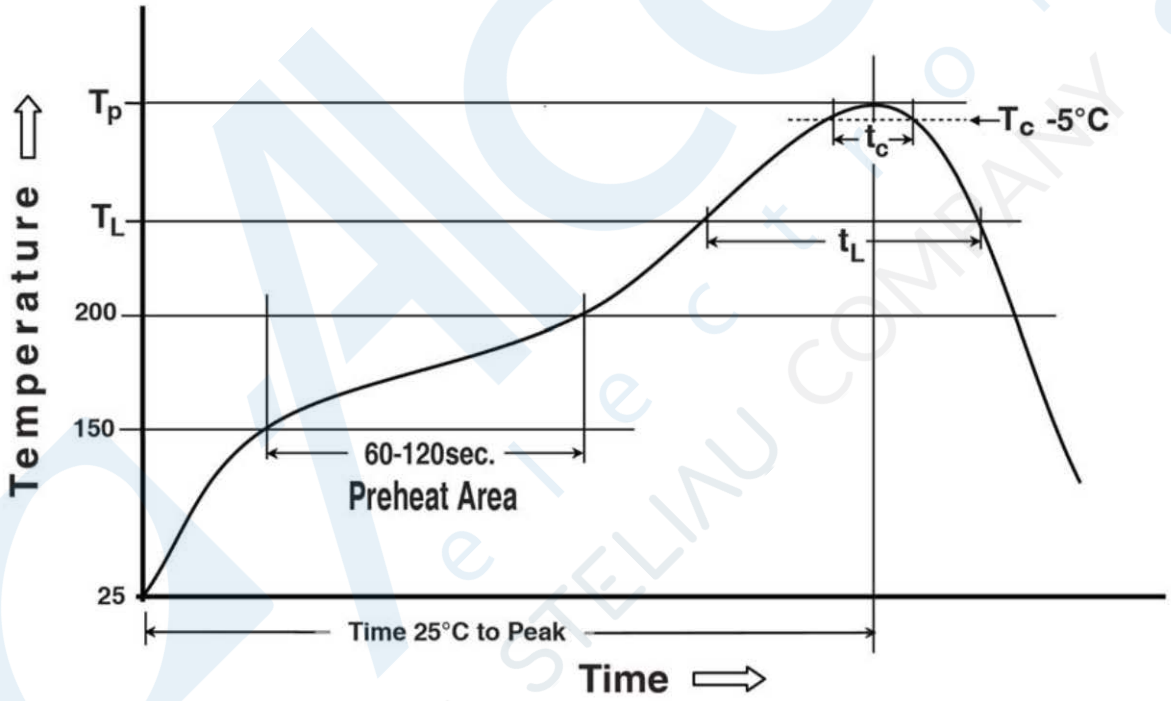
SOLDER ABILITY		
Item	**Requirement**	**Test Condition**
Solderability	Wet Solder Coverage: 90 % Min.	Solder Temperature: 245±3°C Immersion Duration: 3±0.5 sec. Solder: Sn-3Ag-0.5Cu Flux: RMA 25%
Solder-Heat Resistance	ΔR = 40 mΩ Max. No evidence of deformation or fusion of housing and no physical damage after test.	Test connector on PC Board. Pre-heat: 150 to 180°C for 90 sec. Heat 230°C for 30 sec. Peak Temp.: 255 °C

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

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