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

Series	123A-58X01	File	123A-58X01_SPEC_1	Date	2021/06/08

Scope:

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

P/N	Description
123A-58B01	M.2 Socket, H5.8 B Key 0.5 Pitch G/F, Black, Reel
123A-58E01	M.2 Socket, H5.8 E Key 0.5 Pitch G/F, Black, Reel
123A-58M01	M.2 Socket, H5.8 M Key 0.5 Pitch G/F, Black, Reel

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 E6808, UL94V-0, Black
2	Contact	Phosphor Bronze C5210, gold flash plating on contact & solder area, 50u" min. nickel under-plating over all
3	Hold down	Brass C2680, 50u"min. matte tin plating under 50u" min. nickel plating

RATING	
Rated Voltage	50VAC
Rated Current	0.5A
Operating Temperature	-40°C TO +85°C
Storage Temperature	-40°C TO +85°C
Durability	60 CYCLES

ELECTRICAL		
Item	**Requirement**	**Test Condition**
Contact Resistance	55mΩ max.(initial), Δ20mΩ (finish)	Subject mated contacts assembled in housing to closed circuit current of 100mA (max) at open circuit voltage of 20mV voltage (max.) EIA 364-23
Insulation Resistance	500MΩ min.	Measure by applying 500VDC for 2 minutes between adjacent contacts of

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		unmated connector. EIA-364-21
Withstanding Voltage	No Breakdown	Apply 300VAC for 1 minute between adjacent contacts of unmated connector. EIA-364-20

MECHANICAL		
Item	**Requirement**	**Test Condition**
Mating Force/ Unmating Force	2.04Kgf(20N) Max.	Measure the force required to mate/unmate connector, operation Speed: 25.4mm/min. EIA-364-13
Durability	No evidence of physical damage Contact resistance Δ20mΩ max.	Connector shall be subjected to 60 cycles of insertion and withdrawal. Manual insertion/ withdrawal speed rate: 250cycles/hours EIA-364-09
Vibration	Appearance: no damage Discontinuity: 1μsec Max.	15 Minutes in each of 3 mutually perpendicular Direction both mating halves should be rigidly fixed so as not to contribute to the relative motion of one contact against another. EIA-364-28 Test condition VII test condition letter D
Physical Shock	Appearance: no damage Discontinuity: 1μsec Max.	Acceleration: 285G Time: 2ms (half sine wave) Cycles: 3 drops each to normal and reversed directions of X,Y,Z axes, total 18 drops. (EIA-364-27)

ENVIRONMENTAL		
Item	**Requirement**	**Test Condition**
Solder ability	95% min. of solder area 10x the magnifying glass of view	Soldering time : 4~5 second Solder Temperature: 245±5°C (EIA-364-52)
Thermal Shock	Contact resistance Δ20mΩ max.	Mated Connectors -55+/-3℃ (30 min.), +85+/-2℃ (30 min.) Perform this cycle, repeat 10 cycles (EIA-364-32 condition I)
Temperature Life	Contact resistance Δ20mΩ max.	Mated Connector 105℃, 96 hours, (EIA-364-17 test condition IV.)
Humidity	Contact resistance Δ20mΩ max.	Subject mated Connectors to 96 hours at 40℃ with 90~95% RH. (EIA-364-31 Method II Test Condition A.)
Salt Spray	No detrimental corrosion allowed in contact area and base metal	Subject mated connectors to 35+/-2℃ and

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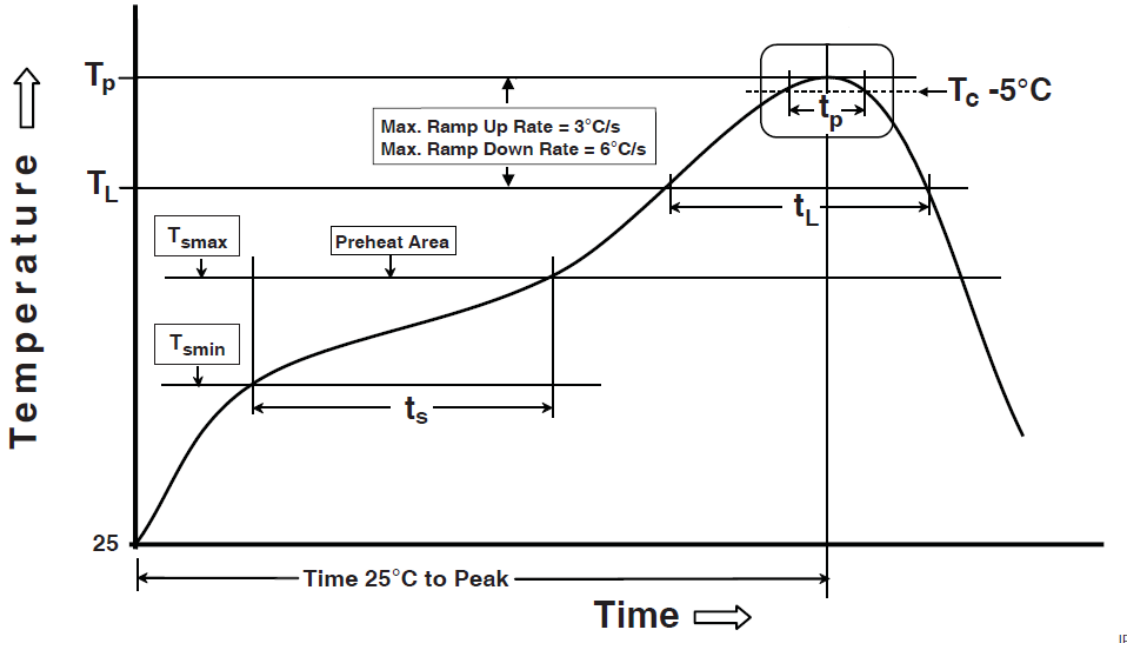
	exposed	5+/-1% salt condition for 48hours. After test, rinse the sample with water and recondition the room temperature for 1 hour. (EIA-364-26)
Mixed flowing gas	Contact Resistance △R=20 mΩMax.(Final)	Mated connectors, Duration: 120 hours (EIA-364-65, class IIA)
Resistance to Reflow Soldering Heat	No physical damage shall occur. Test Initial and final, coplanarity of product shall meet requirements of applicable product drawing and specification.	Test connector on PCB Pre-heat:150~180°C, 90±30sec. Solder heat: 230°C Min, 30±10sec. Peak temp: 260°C Max. 3~5sec.



Preheating temperature: 150 ~ 180°C, 90±30 seconds
Liquidus temperature (TL): 230°C, 30±10 seconds
Peak temperature: 260°C
Time within 5 °C of peak temperature (Tc): 255°C, 30seconds