

SPECIFICATION AND PERFORMANCE

Series	120B-835D00	File	120B-835D00_Spec	Date	2017/06/27
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Scope:

This specification covers the requirements for product performance, test methods and quality assurance provisions of 120B-835D00

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.

MATERIAL AND FINISH		
INSULATOR	Material	LCP UL94V-0, Black
CONTACT	Material	Phosphor Bronze C5210, 0.2t Hold down: Brass, C2680, 0.2t
	Plating	10u" Gold plating on contact area, Tin plating on solder area Hold down: Tin plating
SHELL OR COVER	Material	Stainless Steel, SUS304, 0.2t
LOCK	Material	Stainless Steel, SUS304, 0.2t
RATING	Voltage Rating: 30VAC Current Rating: 1.5A Temperature Rating: -40°C to +85°C	

ELECTRICAL		
Item	Requirement	Test Condition
Contact Resistance	30mΩ max.(initial) ΔR= 15mΩ max.	Subject mated contacts assembled in housing to 20 mV max. open circuit at 10mA.
Dielectric Withstanding Voltage	No creeping discharge nor Flashover shall occur. Current leakage: 1mA max.	500V for one minute. test between adjacent circuit. EIA364, TP-20
Insulation Resistance	1000MΩ min, initial 100MΩ min. after test	Impressed voltage 500VDC for one minute, test between adjacent circuit EIA364, TP-21
Current Rating	30°C max. under loaded rating current 1.5A DC	The contacts shall be wired in series and apply rated current. Measure the temperature rising on contact. IEC512-PT3

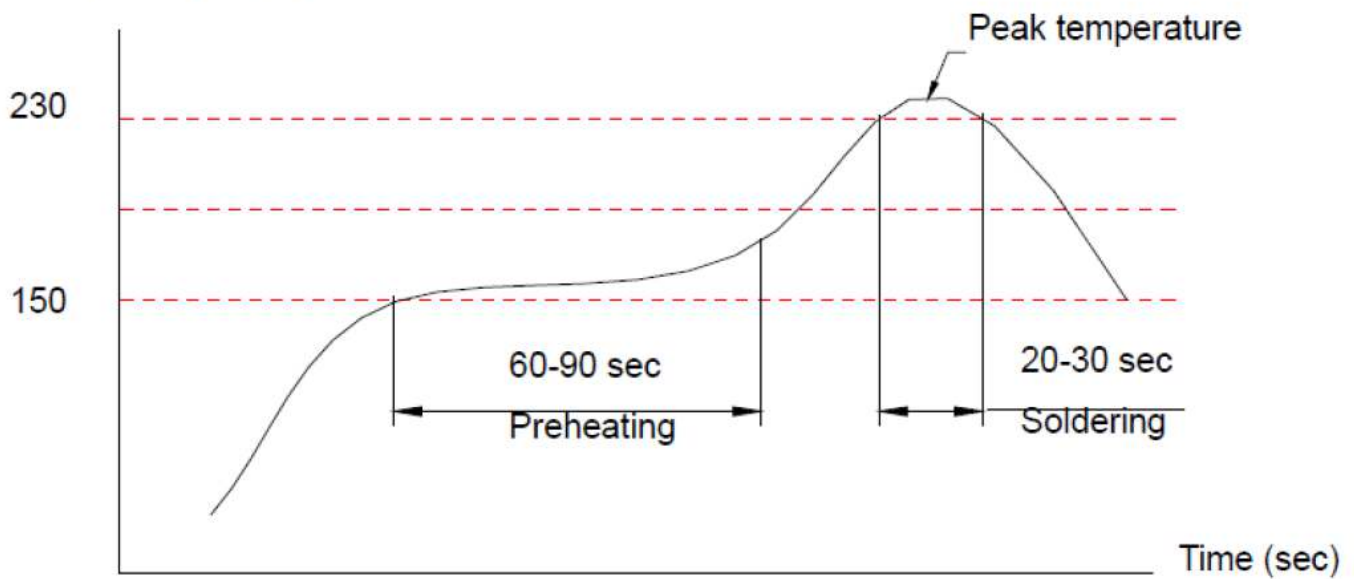
MECHANICAL		
Item	Requirement	Test Condition
Connector durability	30mΩ max, initial ΔR= 15mΩ max.	Cycle rate: 400 to 600 cycles per hours No. of cycles: 10,000cycles EIA364, TP-09
Total Mating Force	28.8N max..	Measure the card push in force at 25mm/min. EIA364, TP-29
Total Unmating Force	3.7N min.	Measure the card extraction force at 25mm/min. EIA364, TP-13
Card Reverse Insertion	No electrical connection and Physical damage to connector. 43.2 N Min. Mating force.	Test speed: 25mm/min. Mating device: Normal CFast card. Reference: EIA364, TP-3
Solderability	Solder Coverage: 95% Min.	Solder Temperature: 245±3°C Immersion Duration: 5±0.5sec. Solderability Test Method, Condition C JESD22-B102D

ENVIRONMENTAL		
Item	Requirement	Test Condition
Humidity	1,000MΩ (Initial) 100MΩ (After Test) 30mΩ max. (Initial) ΔR= 15mΩ max.	Ambient Temp.: 40±2°C R. H.: 90 to 95%, Duration: 96hrs, D/C engaged. EIA364, TP-31 Method II, Condition A,
Thermal Shock	1,000MΩ (Initial) 100MΩ (After Test) 30mΩ max. (Initial) ΔR= 15mΩ max.	Temp. Range: -40 to 85°C No. of Cycles: 5 cycles for 60 minutes Dummy card engaged during test EIA364, TP-32
Physical Shock	No electrical discontinuity greater than 100n sec. shall occur. 30mΩ max. (Initial) ΔR= 15mΩ max.	Accelerated Velocity: 50G (490s/m) Waveform : Semi-Sine Duration : 11m sec. No of Shocks: 3/dir., 3 axis, (18 in total), EIA364, TP-27
Vibration (Low Frequency)	No electrical discontinuity greater than 100n sec. shall occur. 30mΩ max. (Initial) ΔR= 15mΩ max.	Frequency Range: 10-55-10 Total Amplitude: 1.52mm pp or 98.1m/s Duration: 2hrs three axes (6hrs in total) EIA364, TP-28
Temperature Life	30mΩ max. (Initial) ΔR= 15mΩ max.	Chamber Temperature: 85±3°C Duration: 250 hours Dummy card engaged during test EIA364, TP-17
Salt Spray	30mΩ max. (Initial) ΔR= 15mΩ max. Visual: no damage	Atmosphere: salt spray from 5% solution length of test 48hours exposure Temperature: 35±0.5°C No engagement during the test, EIA364, TP-26B

SOLDER ABILITY

Item	Requirement	Test Condition
Solder-Heat Resistance	No evidence of deformation or fusion of housing and no physical damage after test	Test connector on PC board Pre-heat: 150°C to 180°C for 90sec. Heat 230°C for 30sec. Peak Temperature: 255°C±5°C, 10sec.

Temperature (°C)



Test Items	Test Group									
	A	B	C	D	E	F	G	H	I	
	Test Sequence									
Examination of The Product	1,5	1,5	1,6	1,8	1,7	1,7	1,7	1,3	1,3	
Low Level Contact Resistance	2,4		2,5	2,4,6			4,6			
Dielectric Withstanding Voltage					3,6	3,6				
Insulation Resistance					2,5	2,5				
Current Rating				7						
Total Mating Force		2								
Total Unmating Force		3								
Durability	3						2			
Card Reverse Insertion		4								
Vibration			4							
Mechanical Shock			3							
Temperature Life				3						
Reseating				5			5			
Humidity					4					
Thermal Shock						4				
Salt Spray							3			
Solderability								2		
Resistance to Reflow Soldering Heat									2	