Switch Connector

标准&定制开关连接器产品制造商

DONG GUAN XI BANG ELECTRONICS CO., LTD.

规　　格　　书

SPECIFICATION

CUSTOMER NAM	客户名称：	
CUSTOMER NO.	客户编号：	
SERIES	系　　列：	0.8间距 排母连接器
MODEL NO.	型　　号：	
DRAWING NO.	图 形 号：	0.8 spacing row female connector

If specification of this product meets your request, please confirm all the items of it and return to us with signature and stamp, it will be basis of our production and record. Thanks your cooperation in advance!

若此产品规格符合贵司要求，敬请确认此规格书内所有项目

并签名和盖章后回传给我司，以作我司产品制作之

依据和存档之用，多谢合作！

EXAMINE & APPROVAL 审批	
APPROVE 接受	NOT APPROVE 不接受
SIGNATURE 签署　　STAMP盖章　　DATE日期	

PREPARED BY.制表人	CHECKED BY.校对	APPROVED BY.审核	APPROVAL BY. 批准
研发部 戴海明 2022. 06. 08	品质部 黄自清 2022. 06. 08	工程部 庞军 2022. 06. 08	总经办 吴量 2022. 06. 08

东莞市溪榜电子有限公司

Dong guan Xi Bang Electronics Co., Ltd

地址：广东省东莞市黄江镇合路工业区

Address:He Lu Industrial Zone, Huangjiang Town ,Dongguan City, Guangdong Province

Tel: (0769)82055138/82056828

Fax:(0769)83663452

邮箱：admin@alspr.com　switch@alspr.com

http://www.alpsr.cn/　http://www.alpsr.com/

Dong Guan XB ElectronicsCo.,Ltd

AccountNumber：705540238

BankName：CitibankN.A.,HongKongBranch

Country/Region:Hong Kong

BankCode:006

BankAddress：3GardenRoad,Central,Hong Kong

SWIFT/BIC：CITIHKHX(CITIHKHXXXX*If11charactersare required)

MAiL：HK@ALPSR.CN　XB@ALPSR.CN

Quality core! Afterburner for Made in China!

东莞市溪榜电子有限公司
DONG GUAN XI BANG ELECTRONI CS CO., LTD.

SPECIFICATION AND PERFORMANCE

Series	123A Series	File	123A-XXX00_SPEC_1.1	Date	2019/12/06

Scope:

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

P/N	Descriptions
123A-21A00	M.2 Socket, H2.1 A Key 0.5 Pitch G/F, Black, Reel
123A-21B00	M.2 Socket, H2.1 B Key 0.5 Pitch G/F, Black, Reel
123A-21E00	M.2 Socket, H2.1 E Key 0.5 Pitch G/F, Black, Reel
123A-21M00	M.2 Socket, H2.1 M Key 0.5 Pitch G/F, Black, Reel
123A-30A00	M.2 Socket, H3.0 A Key 0.5 Pitch G/F, Black, Reel
123A-30B00	M.2 Socket, H3.0 B Key 0.5 Pitch G/F, Black, Reel
123A-30E00	M.2 Socket, H3.0 E Key 0.5 Pitch G/F, Black, Reel
123A-30M00	M.2 Socket, H3.0 M Key 0.5 Pitch G/F, Black, Reel
123A-40A00	M.2 Socket, H4.0 A Key 0.5 Pitch G/F, Black, Reel
123A-40B00	M.2 Socket, H4.0 B Key 0.5 Pitch G/F, Black, Reel
123A-40E00	M.2 Socket, H4.0 E Key 0.5 Pitch G/F, Black, Reel
123A-40M00	M.2 Socket, H4.0 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	Insulator	LCP, UL94V-0, Black
2	Upper contact	Phosphor Bronze C5210, contact area gold flash, solder area gold flash, all under plating 50u" nickel.
3	Lower contact	Phosphor Bronze C5210, contact area gold flash, solder area gold flash, all under plating 50u" nickel.
4	Hold down	Brass C2680, 100u" matte tin over 50u" nickel plating

RATING	
Rated Voltage	50VAC
Rated Current	0.5A
Operating Temperature	-40°C~+85°C
Storage Temperature	-40°C~+85°C
Durability	60 mating cycles

ELECTRICAL		
Item	**Requirement**	**Test Condition**
Low Level Contact Resistance	Initial: 55mΩ max. After: Δ20mΩ max.	Solder connectors on PCB and mate them together, measure by applying closed circuit current of 100mA maximum at open circuit voltage of 20mV (max). (JIS C5402 5.4)
Dielectric withstanding Voltage	No breakdown	Mate connectors; apply 300V AC at 60 Hz(rms.) between two adjacent for 1 minute. (Trip current:0.5mA) (MIL-STD-202 METHOD 301)
Insulation Resistance	500 MΩ Min.	Apply 500V DC between adjacent contacts, or contact and ground. (MIL-STD-202 METHOD 302)
Temperature Rating	30°C Max.	Mate connector: measure the temperature rise at rated current after 0.5A/Power contact. .(EIA-364-70 Method 2.)

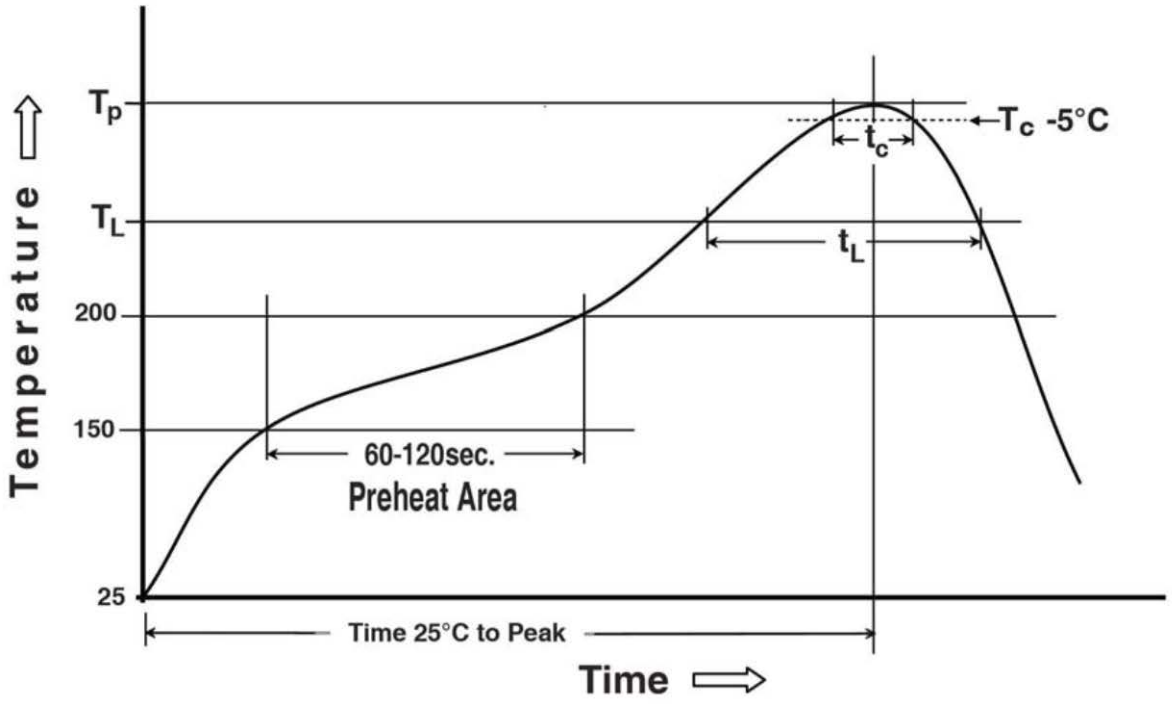
MECHANICAL		
Item	**Requirement**	**Test Condition**
Mating/ Unmating Force	Mating: 20N Max. Unmating: 25N Max.	Card mating/unmating sequence: a) Insert the card at the angle specified by the manufacturer b) Rotate the card into position c) Reverse the installation sequence to unmated Operation Speed:25mm/min. Measure the force required to mating/unmating connector. (EIA-364-13, Method A.)
Durability	Finish 1.Contact Resistance: 20mΩ Max. change 2.No Damage	After 60 mating and unmating cycles with 1.0mm thick board at the rate of 25±3mm/min. The connector shall be of no damage to the housing or contacts. The connector shall also meet the requirements of contact resistance in the paragraph 5.1. (EIA364-09)
Vibration	Finish 1. No electrical discontinuity more than 0.1μs. 2 .No Damage 3 .Contact Resistance: 20mΩ Max. change	Mate dummy card and subject to the following vibration conditions, for a period of 30 minutes in each of 3 mutually perpendicular axis, passing DC 1 mA during the test. Amplitude: 1.52 mm P-P or 19.6 m/s² Frequency: 10-55-10Hz Shall be traversed in 1minute. (MIL-STD-202 METHOD 201)
Shock	Finish 1. No electrical discontinuity more than 0.1μs. 2 .No Damage 3 .Contact Resistance: 20mΩ Max. change	Solder connectors on PCB and mate them together, subject to he following shock conditions, 3 shocks shall be period along 3 mutually perpendicular axis, passing DC 1mA current during the test. A (50G,11ms Half-sine) (MIL-STD-202 METHOD 213)

ENVIRONMENTAL

Item	Requirement	Test Condition		
Thermal Shock	Finish 1. Contact Resistance: 20mΩ Max change 2. No abnormality	Stage	Temp. ±5°(°C)	Time (Minute)
		t1	-55°C	30
		t2	-55°C~+85°C	5
		t3	+85°C	30
		t4	+85°C~-55°C	5
		Test time: 5 cycles (MIL-STD-202 METHOD 107)		
Temperature Life	Contact Resistance: 20mΩ Max. change	Mated Connector 105°C, 120 hours, (EIA-364-17, Method A.)		
Cold Resistance	Contact Resistance: 20mΩ Max. change	Solder connectors on PCB and mate them together, expose to -55 for 96hrs. Upon completion of the exposure period, the test specimens shall be conditioned at ambient room conditions for 1 of 2hrs, after which the specified measurements shall be performed.(EIA364-59)		
Humidity	Contact Resistance: 20mΩ Max change Insulation Resistance: 100MΩ (Min)	Humidity storage at +40±3°C with 90±5% RH for 96 hours. (EIA364-31)		
Salt Spray	Contact Resistance: 20mΩ Max change No Damage	5±1% salt solutions, at 35±2°C duration 24 hours. Connectors detached (MIL-STD-1344)		

SOLDER ABILITY

Item	Requirement	Test Condition
Solder ability	95% of immersed area must show no voids , pin holes.	Dip solder tails into the molten solder(held at 245 ±5°C) up to 0.5mm from the tip of tails for 3±0.5 seconds. (MIL-STD-202 METHOD 208)
Resistance to soldering heat	No melting, cracks or functional damage allowed	All connectors designed for PCB soldering within this specification must be able to withstand the heat from solder oven according to the graph below. The cycle should be repeated twice. (MIL-STD-202 METHOD 210)



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

东莞市溪榜电子有限公司
DONG GUAN XI BANG ELECTRONI CS CO., LTD.
Switch Connector

Table: Products Qualification Test Sequence

No.	Test item	Test Group and Sequence										
		A	B	C	D	E	F	G	H	I	J	K
1	Contact Resistance	1,6	1,3	1,3	1,3	1,3	1,3	1,3	1,4	1,3		
2	Insulation Resistance								2,5			
3	Dielectric Withstanding Voltage	2										
4	Temperature Rise		2									
5	Mating/ Unmating Force	3,5										
6	Durability	4										
7	Vibration			2								
8	Shock				2							
9	Thermal Shock					2						
10	Temperature Life						2					
11	Cold Resistance							2				
12	Humidity								3			
13	Salt Spray									2		
14	Solder Ability										1	
15	Resistance to Soldering Heat											1
Sample Quantity		4	4	4	4	4	4	4	4	4	4	4