

山旗电子(香港)实业有限公司		图号 (DWG NO)	单位 (UNIT): MM
品名 (ITEM NO)	MINI USB 5P/F 90° SMT (B型四脚)	版本 (REV)	A/0
料号 (PART NO)	ST-USB-013A	日期 (DATE)	2011.06.21
型号 (MODEL NO)	A003-1C-1	设计 (DESIGN)	冯国文
		审核 (CHECKED)	
		核准 (APPROVED)	
		未注公差 TOLERANCE UNSPECIFIED	
		XX ±0.30	
		XXX ±0.20	
		XXXX ±0.10	
		X° ±5°	
		XX° ±2°	

规格说明: Specifications:

电气特性: Electrical:

- 额定电流: Current Rating
1.0A/contact terminal
- 额定电压: Voltage Rating
30V DC
- 接触阻抗: Contact Resistance
50 milliohms MAX
- 耐电压: Dielectric Withstanding Voltage:
300 V AC AT Sea Level
- 绝缘阻抗: Insulation Resistance:
100MEGA ohms MIN

物理性能: Mechanical:

- 插拔力: Connector Mate and Unmate Force
Mate force: 3.0kgf (MAX)
Unmate force: 0.7kgf (MIN)
- 端子保持力: Terminal Retention
0.5kgf (MIN)

原材料: Material:

- 塑胶: Housing:
Hing Temperature Thermoplastics,
U1 94V-0 LCP Black
- 端子: Contact: Copper Alloy C5191/C2680
- 外壳: Shell: Copper Alloy C2680

电镀: Finish:

- 端子: Contact: Plated Gold in Mating Area;
Tin On Solder Tails
- 外壳: Shell:
Nickel Plating

Sungtech

COMTEK ELECTRONICS CO., LTD.

PRODUCT SPECIFICATION

PRODUCT NAME

MINI USB

SPECIFICATION NUMBER

DOC. NO.:

AUTHOR:

DATE:

REV.: A

APPROVED

SIGNED:

DATE:

CHECKED

SIGNED:

DATE:

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1.0 SCOPE

This document contains general suntech requirements, qualification requirements, and those specific electrical and mechanical requirements.

2.0 APPLICABLE DOCUMENTS AND SPECIFICATIONS

See drawings and any other sections of this specification for the relevant reference documents. In cases where the product specification differs from the product drawings, the product drawings take precedence.

3.0 RATINGS

3.1.Rated Current	AC 0.5A
3.2.Rated Voltage	AC 5V
3.3.Operating Temperature Range	-0°C to +50°C
3.4.Storage Temperature Range	-20°C to +85°C
3.5.Nominal Temperature Rating	+20°C

4.0 MATERIAL SPECIFICATIONS

4.1. Plastic body: LCP.

4.2. Shell: Phosphor Bronze

Tin Plating

4.3.Contact: Phosphor Bronze

Solder area: Tin

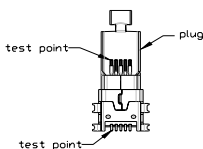
Contact area: Au 5u”

5.0 EXAMINATION OF PRODUCT

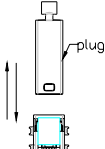
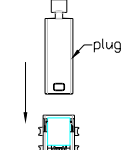
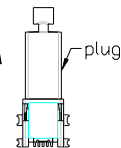
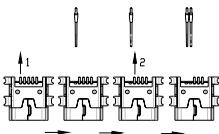
<u>Item</u>	<u>Test Condition</u>	<u>Requirement</u>
5.1. Examination of product (Outward Appearance Structure)	EIA364-18 Shall be confirmed with eyes by using magnifying glass 5x.	1. Outward Appearance shall be good without such injurious problem

6.0 ELECTRICAL PERFORMANCE SPECIFICATIONS

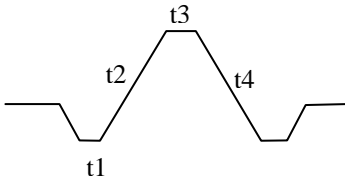
<u>Item</u>	<u>Test Condition</u>	<u>Requirement</u>
6.1. Low Level Contact Resistance	EIA 364-23 Mated connector with dry circuit of 20mV, 100mA max.	50mΩ (Max)
6.2. Insulation Resistance	EIA 364-21 Unmated connector with 500VDC between adjacent contacts.	100MΩ (Min.)
6.3. Dielectric Withstanding Voltage	EIA 364-20 Unmated connector with 100VAC for 1 minute between adjacent contacts.	0.5mA(Max.) leakage of current
6.4 Contact Capacitance	EIA 364-30 Unmated connector with 2pF between adjacent contacts	2pF(Max.)



7.0 MECHANICAL PERFORMANCE SPECIFICATIONS

<u>Item</u>	<u>Test Condition</u>	<u>Requirement</u>
7.1.Durability	EIA 364-09 Mate contacts at rate of 200 cycles per hour max. to 5,000 cycles.	Shall meet visual requirement, show no physical damage.
		
7.2. Random Vibration	EIA 364-28 Test condition V Test Letter A .Subject mated connectors to 5.35G's rms. 15 minutes in each of 3 mutually perpendicular planes.	No discontinuities of 1 μ sec or longer duration. Shall meet visual requirement, show no physical damage.
7.3.Insertion Force	EIA 364-13 Measure force necessary to mate assemblies at rate of 12.5mm/min (max.)	35N (Max.)
		
7.4.Extraction Force	EIA 364-13 Measure force necessary to mate assemblies at rate of 12.5mm/min (max.)	1N (Min.)
		
7.5.Physical Shock	EIA 364-27 Test condition A Subject mated connectors to 50G's half-sine shock pulses of 11ms duration.3 shocks in each direction applied along 3 mutually perpendicular planes, 18 total shock	1. No discontinuities of 1 μ sec or longer duration. 2. Shall meet visual requirement, show no physical damage.
7.6.Retention force	Measured by pulling the pin and adjacent pin which have been inserted into the plastic body at the speed of 0.2 mm/s .	3 N (Min.) for each pin.
		

8.0 ENVIRONMENTAL PERFORMANCE SPECIFICATIONS

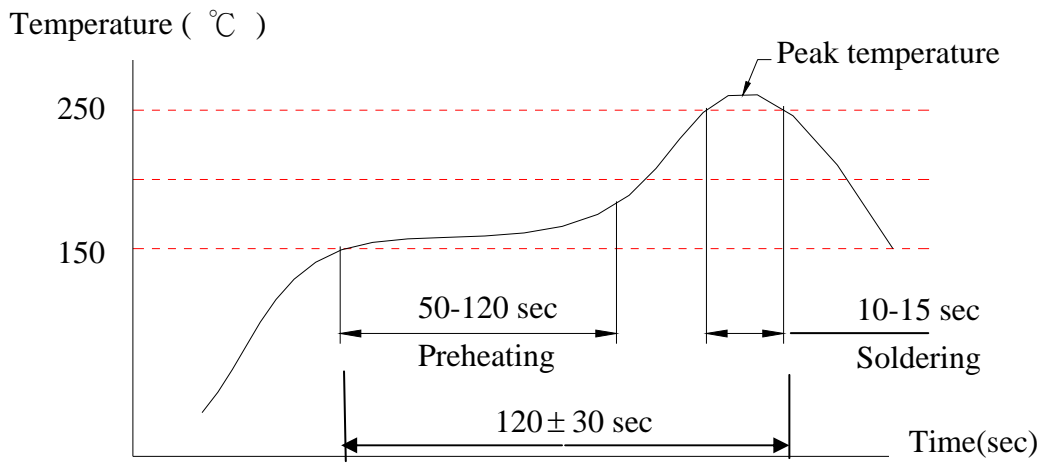
<u>Item</u>	<u>Test Condition</u>	<u>Requirement</u>																				
8.1. Thermal shock	EIA 364-32 Test condition I	Shall meet visual requirement, show no physical damage.																				
	<table border="1"> <thead> <tr> <th>Stage</th> <th>Temp</th> <th>Time</th> </tr> </thead> <tbody> <tr> <td>t1</td> <td>-55°C</td> <td>15~30 min</td> </tr> <tr> <td>t2</td> <td>-55~+8</td> <td>5 min</td> </tr> <tr> <td>t3</td> <td>5°C</td> <td>15~30 min</td> </tr> <tr> <td>t4</td> <td>+85°C</td> <td>15~30 min</td> </tr> <tr> <td></td> <td>+85~-5</td> <td>5 min</td> </tr> <tr> <td></td> <td>5°C</td> <td></td> </tr> </tbody> </table> <p>Test time: 10 cycle</p>		Stage	Temp	Time	t1	-55°C	15~30 min	t2	-55~+8	5 min	t3	5°C	15~30 min	t4	+85°C	15~30 min		+85~-5	5 min		5°C
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	5°C																					
8.2. Humidity Life	EIA 364-31 Test condition A Method III (See the following figure. Follow step1 to step7a.) Subject mated connectors to 168 hours (7 complete cycle)	Shall meet visual requirement, show no physical damage.																				
8.3. Solderability	EIA 364-52 After one hour steam aging.	The surface of the portion to be soldered shall at least 95% covered with new solder coating, as specified in Category 2 (1.0 hour±5minutes).																				
8.4. Solder Heat Resistance	See the following figure.	No degradation in performance of physical damages after test.																				

8.0 ENVIRONMENTAL PERFORMANCE SPECIFICATIONS

Peak temperature: 260°C

Soldering temperature: 250°C

Preheating temperature: 150-175°C



SOLDERING TEMPERATURE/TIME PROFILE

9.0 PACKING

Tape & Reel