SWEETA PRODUCTS CORPORATION

SPECIFICATION

TITLE	SPC. NO.	PAGE： 1 OF 5
AC POWER SOCKET	SWHJC-027	DATE： 2001.06.27

SPECIFICATION

1. ⚠1 Standard atmospheric condition：

Unless otherwise specified, the standard range of atmospheric conditions for making measurements and tests are as follows：

Ambient Temperature：15℃ to 35℃

Relative Humidity ：45% to 85%

Air Pressure ：86kPa to 106kPa

If there is any doubt about the results, measurements shall be made within the following limits：

Ambient Temperature：20 ±2℃

Relative Humidity：60% to 70%

Air Pressure ：86kPa to 106kPa

Storage Temperature Range：-20℃ to 65℃

Operating Temperature Range：-10℃ to 55℃

Operating temperature range is the range of ambient temperature for the component that can be operated continuously at rated voltage and rated current.

2. Electrical characteristics：

Item	Condition	Specifications
2.1 Rated voltage Rated current		AC 250V 2.5A
2.2 Dielectric strength	⚠2 Power socket shall withstand 4000V AC（50 to 60Hz）. Alternating current between each pin terminal for one minute.	Without damage to parts, arcing or breakdown, etc.
2.3 Insulation resistance	A voltage of 500 V DC shall be applied for 1 minute. After which measurement shall be made.	100MΩ MIN.
2.4 Contact resistance	Measurement shall be made at 1000Hz with small current and voltage.（100mA max. 2mV max.）	50mΩ MAX.

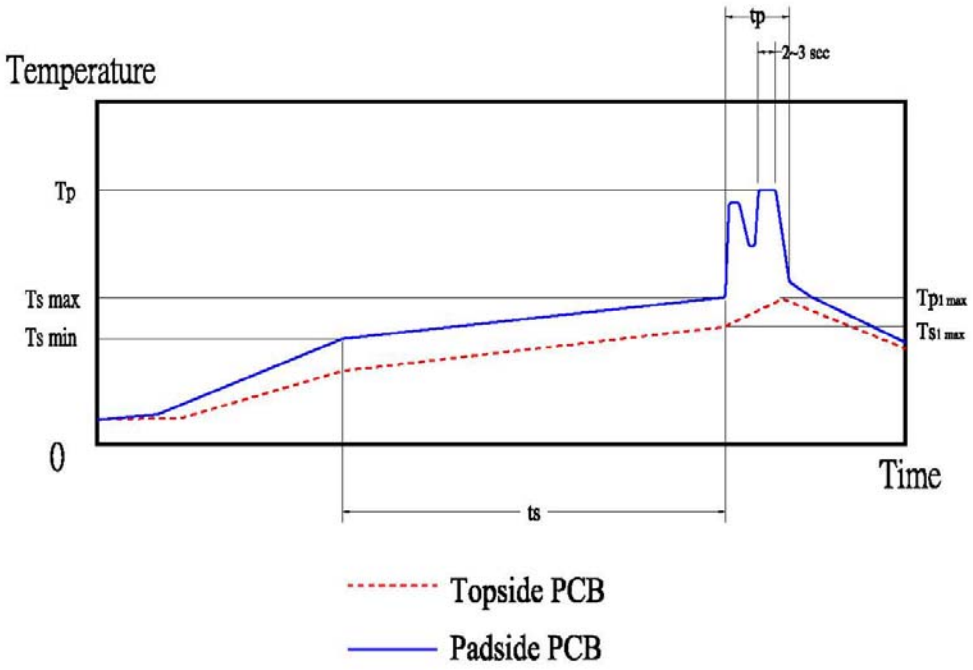
ISSUE	DATE	WRTN	CHKD	APVD	DESCRIPTIONS
	2001.06.27	STEVEN	KUNG		UP DATE
⚠1 x3	2007.12.24	JACKAL	JOHNSON	DICK	修改 Solder ability、Resistance to soldering heat、Standard atmospheric condition.。
⚠2 x3	2010.09.16	PATRICK	PAUL	HELEN	Modify item 2.2。Add item 7、8。

3. Mechanical characteristics

Item	Condition	Specifications
3.1 Operating force	Insertion and withdrawal force shall be measured by using a gauge of standard dimensions.	4.9N～58.8N（0.5Kgf～6.0Kgf）
3.2 Terminal strength	A static load of 19.6N（2Kgf）shall be applied to the tip of the terminals for 5 seconds. in any direction.	Without cracks or excessive looseness to the terminal. Electrical and mechanical characteristics shall be satisfied. Without play in terminal, etc.

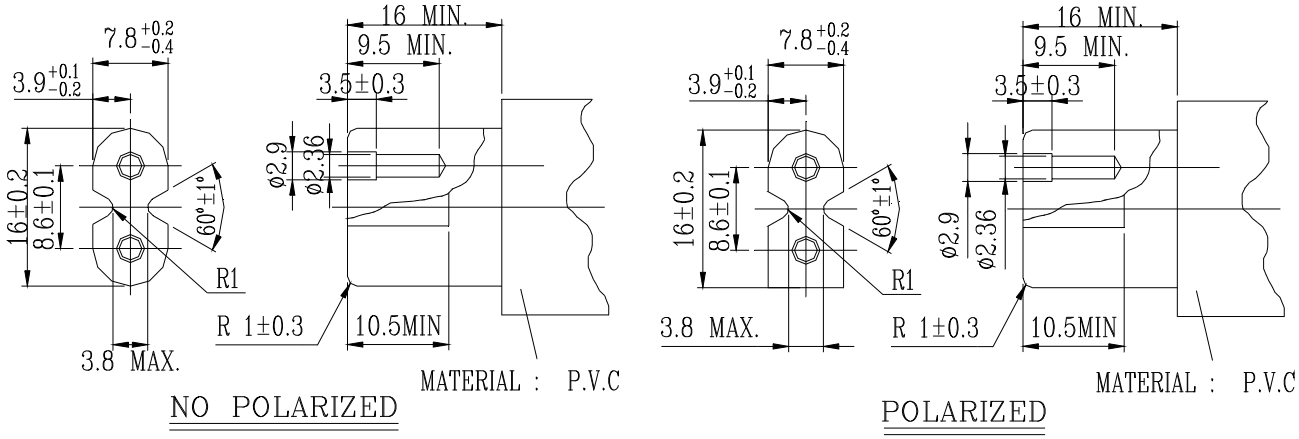
4. Endurance characteristics

Item	Condition	Specifications
4.1 Solderability	⚠1Temperature of solder：250℃±5℃ Time of dip：3 ±0.5 seconds Length of dip：2 ±0.5mm（from top of terminal）	The soldered area shall be covered a minimum of 90% of the surface being immersed.

<table>
<tr><td>Item</td><td colspan="3">Condition</td><td>Specifications</td></tr>
<tr><td rowspan="7">⚠1
4.2 Resistance to Soldering Heat Test</td><td colspan="3">Wave soldering Process</td><td rowspan="5">Electrical and mechanical characteristics shall be satisfied,
and not show remarkable failure.</td></tr>
<tr><td rowspan="2">Profile Feature</td><td colspan="2">Pb-Free Assembly</td></tr>
<tr><td>Topside PCB</td><td>Padside PCB</td></tr>
<tr><td>Preheat
-Temperature min
-Temperature max
-Time (t_s min to max)</td><td>120℃
(T_{sl} max)</td><td>110℃
(T_s min)
150℃
(T_s max)
75 sec</td></tr>
<tr><td>Peak/Classification Temperature</td><td>165℃
(T_{pl} max)</td><td>260℃ ±5℃
(T_p)</td></tr>
<tr><td>Time within 5℃ of actual Temperature (t_p)</td><td></td><td>10 sec (within 2 times every time 2-3 sec)</td></tr>
<tr><td colspan="4">Wave Soldering Temperature Profile are as below
 
</td></tr>
<tr><td>Soldering Iron Test
Temperature of soldering Iron：380±10℃
Soldering time：3±1 seconds</td><td colspan="2">Same as Wave soldering Process</td></tr>
<tr><td colspan="2">Insertion force</td><td>4.9N～58.8N（0.5kgf～6.0kgf）</td></tr>
<tr><td colspan="2">Withdrawal force</td><td>4.9N～58.8N（0.5kgf～6.0kgf）</td></tr>
</table>

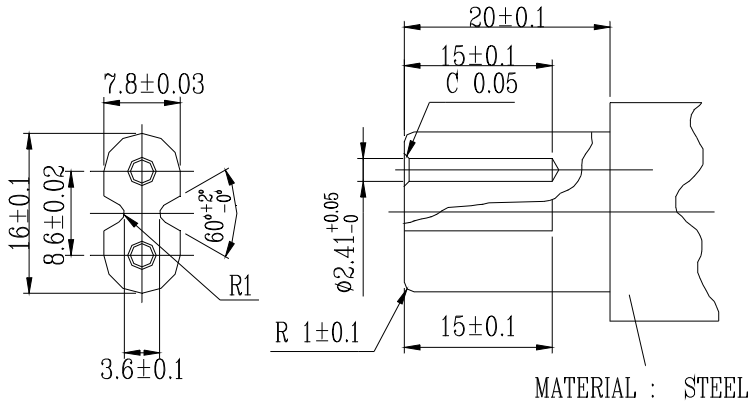
Item	Condition	Specifications
4.3 Humidity test	The socket shall be stored at a temperature of 40℃ ±2℃and a humidity of 90%～95% for 240 hours, and shall then be returned and allowed to remain at room condition for a period of 30 minutes, and blew off any water drops on the surface of the socket by air.	The following items shall be satisfied. However damage which do not affect performance will be considered acceptable. No.2.2, 2.3, 3.1, 3.2 Contact resistance： 100mΩ MAX.
4.4 Dry heat	The socket shall be stored for 240 hours at a temperature of 70±2℃, and shall then be returned and allowed to remain at room condition for a period of 30 minutes, after which measurement shall be made.	
4.5 Cold test	The jack shall be stored for 240 hours at a temperature of －25℃±3℃,and shall then be returned and allowed to remain at room condition for a period of 30 minutes, after which measurement shall be made.	
4.6 Operating endurance	The life test shall consist of 5000 times of insertion and withdrawal with the mate plug at a rate of 20 to 30 times per minute under no load. Testing plug with putting electric conducted grease to avoid overheating and friction.	

5. Mating plug：



When above cord spec is inserted into or withdrawal from AC SOCKET, internal switch of AC SOCKET should be no problem.

6. Testing plug：



△2 7. Soldering condition shelf life about 6 months depend on storage condition of humidity, temperature and others factors.

△2 8. Endurance test sequence

Test group / Test sequence / Test Item		A	B	C	D	E	F
2.2	Dielectric strength		1,6	1,6	1,6	1,6	1,6
2.3	Insulation resistance		2,7	2,7	2,7	2,7	2,7
2.4	Contact resistance		3,8	3	3	3	3
3.1	Operating force		4	4,8	4,8	4,8	4,8
3.2	Terminal strength			9	9	9	9
4.1	Solderability	5					
4.2	Resistance to Soldering Heat Test		5				
4.3	Humidity test			5			
4.4	Dry heat				5		
4.5	Cold test					5	
4.6	Operating endurance						5

Test sample quality：2 pcs min. / group