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SPECIFICATION

1. \triangle Standard atmospheric condition :

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

Ambient temperature : 15°C to 35°C

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 \pm 2°C

Relative humidity : 60% to 70%

Air pressure : 86kPa to 106kPa

Storage Temperature Range : -20°C to 65°C

Operating Temperature Range : -10°C to 55°C

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

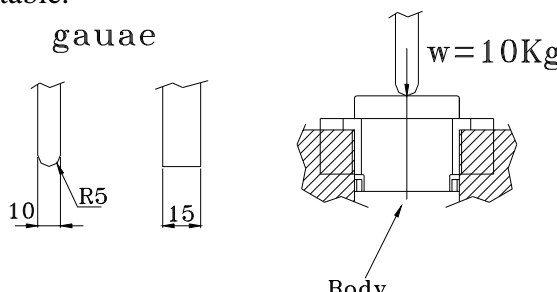
2. Electrical characteristics:

	Item	Condition	Specifications
1	Rated voltage Rated current		AC 250V,2.5A or AC 125V,7A
2	Dielectric strength	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.
3	Insulation resistance	A voltage of 500V DC shall be applied for 1 minute. After which measurement shall be made.	100M Ω MIN.
4	Contact resistance	Measurement shall be made at 1000Hz with small current (AC 100mA MAX.)	20m Ω MAX.

ISSUE	DATE	WRN	CHKD	APVD	DESCRIPTIONS
	2002.06.24	陳樹民	龔雲輝	龔雲輝	
\triangle x4	2007.12.21	李勇達	夏正雄	郭遠峰	修改 Solder ability、Resistance to soldering heat
\triangle x3	2013.01.17	李阮龍	郭素玲	郭遠峰	Modify the item 4.2 Add the item 5、8
\triangle x0	2014.09.29	郭素玲	郭遠峰	郭遠峰	Delete the Factory address

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3. Mechanical characteristics

Item	Condition	Specifications
1 Operating force	Insertion and withdrawal force shall be measured by using testing plug.	9.8N~58.8N (1kgf~6.0kgf)
2 Terminal strength	A static load of 58.8N (6Kgf) 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.
3 Strength of tapping part	The tapping part shall be capable of a torque of 98N-cm(10Kgf-cm)for 5 seconds by M3X8 tapping tight screw and panel (t=1) .	The terminal shall not be broken.
4 Body strength	<p>The body strength test shall be clamp down on housing of 98N (10kg) for 60 seconds by gauge.</p> <p>A slight notch on the surface of body is acceptable.</p> 	The jack shall not be broken.

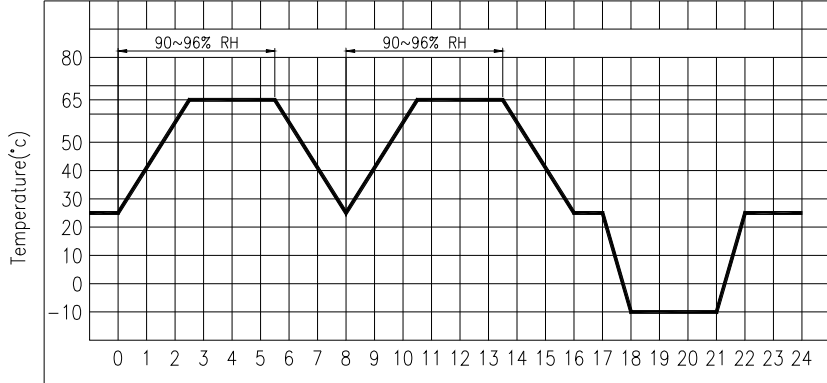
4. Endurance characteristics

Item	Condition	Specifications
1 Solderability	<p>Temperature of solder : Δ 250°C±5°C</p> <p>Time of dip : 3±0.5 seconds</p> <p>Length of dip : 2±0.5mm (from top of terminal)</p>	A new uniform of solder shall cover a minimum of Δ 90% of the surface being immersed.

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Item	Condition	Specifications		
2 Resistance to Soldering Heat Test △	Wave soldering Process			
	Profile Feature	Pb-Free Assembly	Electrical and mechanical characteristics shall be satisfied, and not show remarkable failure.	
		Topside PCB		Padside PCB
	Preheat -Temperature min -Temperature max -Time (t _s min to max)	120°C (T _{sl} max)		110°C (T _s min) 150°C (T _s max) 75 sec
	Peak/Classification Temperature	165°C (T _{pl} max)		260°C ±5°C (T _p)
	Time within 5°C of actual Temperature (t _p)			10 sec (within 2 times every time 2-3 sec)
	Time 25°C to Peak temperature			3 minutes max
	Wave Soldering Temperature Profile are as below			
	△ About the plastic properties , Please refer to the data sheet of plastic.			
	<p>The graph plots Temperature on the y-axis and Time on the x-axis. It shows two curves: a dashed red line for Topside PCB and a solid blue line for Padside PCB. The curves start at a low temperature, rise through a preheat phase (ts) to a plateau between Ts min and Ts max. Both curves then rise to a peak (Tp) during the wave soldering phase (tp), which is noted as 2-3 seconds. After the peak, both curves cool down. The peak temperature for the padside (Tp) is higher than for the topside (Tp1 max). The cooling rate is also indicated by Ts1 max.</p>			
Soldering Iron Test Temperature of soldering Iron : 380±10°C Soldering time : 3±1 seconds		Same as Wave soldering Process		
Insertion force		9.8N~58.8N (1.0kgf~6.0kgf)		
Withdrawal force		9.8N~58.8N (1.0kgf~6.0kgf)		

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Item	Condition	Specifications
3 Humidity test	The socket shall be stored at a temperature of 40°C±2°C and a humidity of 90%~95% for 96 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.	Electrical and mechanical characteristics shall be satisfied.
	Contact resistance	40mΩ MAX.
4 High temperature test	The socket shall be stored for 96 hours at a temperature of 70±2°C, and shall then be returned and allowed to remain at room condition for a period of 30 minutes, after which measurement shall be made.	Electrical and mechanical characteristics shall be satisfied. There shall show no evidence of cracking, and deformation of the insulation.
	Contact resistance	40mΩ MAX.
5 Low temperature test	The jack shall be stored for 96 hours at a temperature of -25°C±3°C, and shall then be returned and allowed to remain at room condition for a period of 30 minutes, after which measurement shall be made.	Electrical and mechanical characteristics shall be satisfied. There shall show no evidence of cracking, and deformation of the insulation.
	Contact resistance	40mΩ MAX.
6 Composite temperature/humidity cyclic test	The power sockets shall be subjected to the conditions as shown in below, and then shall be returned and allowed to remain in room ambient condition for 30 minutes.	Electrical and mechanical characteristics shall be satisfied.
	Contact resistance  40mΩ MAX.	

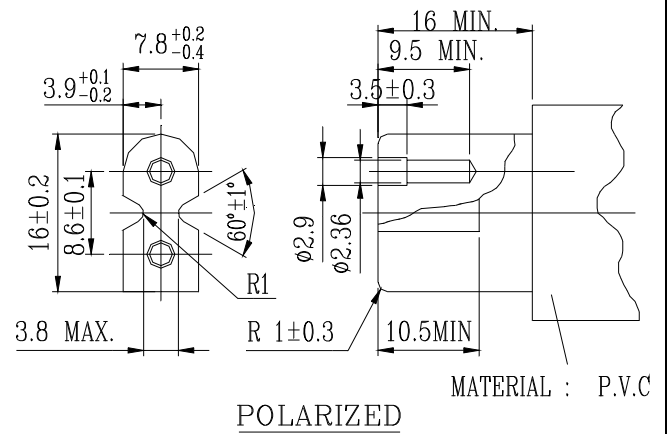
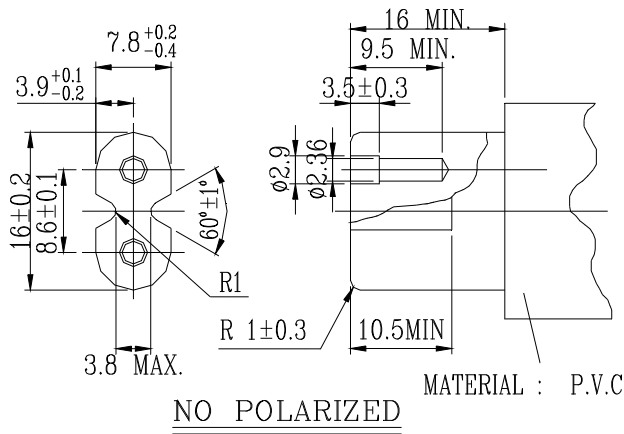
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	Item	Condition	Specifications
7	Operating endurance	The life test shall consist of 5000 times of insertion and withdrawal with the mate plug at a rate of 20 to 30 times per minute under no load. Testing plug with putting electric conducted grease to avoid overheating and friction.	Electrical and mechanical characteristics shall be satisfied.
		Contact resistance	40mΩ MAX.

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

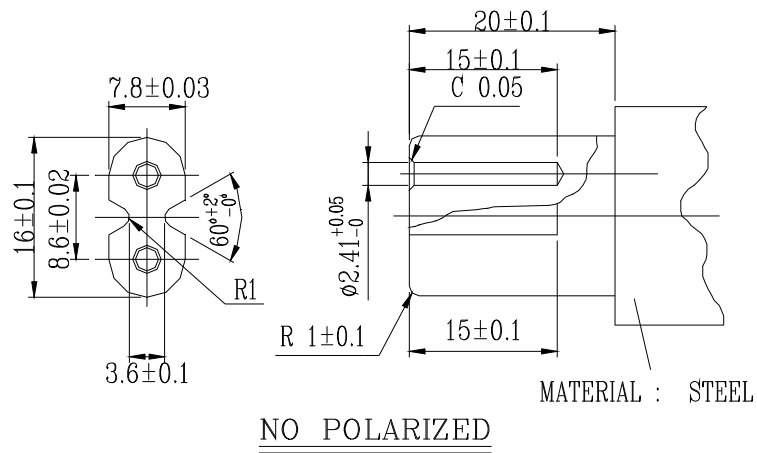
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6.Mating plug :



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

7.Testing plug :



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△8. Endurance test sequence

Test group		Sample group									
NO.	Test item	A	B	C	D	E	F	G	H	I	J
2.2	Dielectric strength	1,6				1,6	1,6	1,6	1,6	1,6	1,6
2.3	Insulation resistance	2,7				2,7	2,7	2,7	2,7	2,7	2,7
2.4	Contact resistance	3,8				3,8	3	3	3	3,8	3
3.1	Operating force	4,9				4,9	4,8	4,8	4,8	4	4,8
3.2	Terminal strength	5									
3.3	Strength of tapping part		1								
3.4	Body strength			1							
4.1	Solderability Test				1						
4.2	Composite temperature / humidity cyclic test					5					
4.3	Humidity test						5				
4.4	High Temperature Test							5			
4.5	Low Temperature Test								5		
4.6	Resistance to Soldering Heat test									5	
4.7	Operating endurance										5

Test sample quality : 2 pcs / group