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SPECIFICATION

1. 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 ±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.

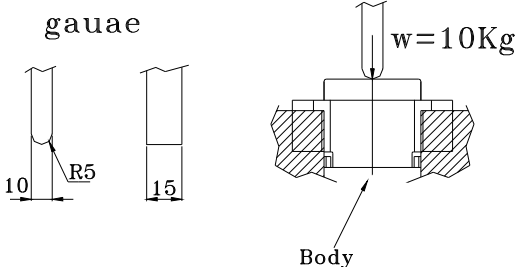
2. Electrical characteristics:

Item	Condition	Specifications
2.1 Rated voltage Rated current		AC 250V.2.5A or AC 125V.7A
2.2 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.
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 (AC 100mA MAX.)	20mΩ MAX.

ISSUE	DATE	WRTN	CHKD	APVD	DESCRIPTIONS
△x1	2012.11.14	黃健瑋	郭素玲	郭遠峰	To modify the item 4.2.

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3. Mechanical characteristics

Item	Condition	Specifications
3.1 Operating force	Insertion and withdrawal force shall be measured by using a gauge of standard dimensions.	9.8N~58.8N (1Kgf~6.0Kgf)
3.2 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.
3.3 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.
3.4 Body strength	<p>The body strength test shall be clamp down on housing of 10kg for 60 seconds by gauge. A slight notch on the surface of body is acceptable.</p>  <p style="text-align: center;">gauge</p> <p style="text-align: center;">w=10Kg</p> <p style="text-align: center;">Body</p>	The jack shall not be broken.

4. Endurance characteristics

Item	Condition	Specifications
4.1 Solderability	<p>The socket shall be dipped into soldering flux of GX-7 (ASAHI CHEMICALS) or equivalent to preflux, and shall be immersed into molten solder of $250\pm 5^{\circ}\text{C}$ for a period of 3 ± 0.5 seconds.</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 90% of the surface being immersed.

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Item	Condition	Specifications		
4.2 Resistance to Soldering Heat Test	Wave soldering Process	Electrical and mechanical characteristics shall be satisfied, and not show remarkable failure.		
	Profile Feature		Pb-Free Assembly	
			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 against Time. It shows two curves: a dashed red line for Topside PCB and a solid blue line for Padside PCB. The process starts at 0, rises through a preheat phase (t_s) to a plateau between T_s min and T_s max. It then rises to a peak (T_p) for a duration (t_p) of 2-3 seconds. After the peak, it cools down to a level between T_{s1} max and T_{p1} 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 (1Kgf ~ 6.0Kgf)		
Withdrawal force		9.8N ~ 58.8N (1Kgf ~ 6.0Kgf)		

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Item	Condition	Specifications
4.3 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.
4.4 Dry heat	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.	
4.5 Cold 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.	
4.6 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 °	



Time in hours (h)

(4CYCLES)

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Item	Condition	Specifications
4.7 Life test	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.

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

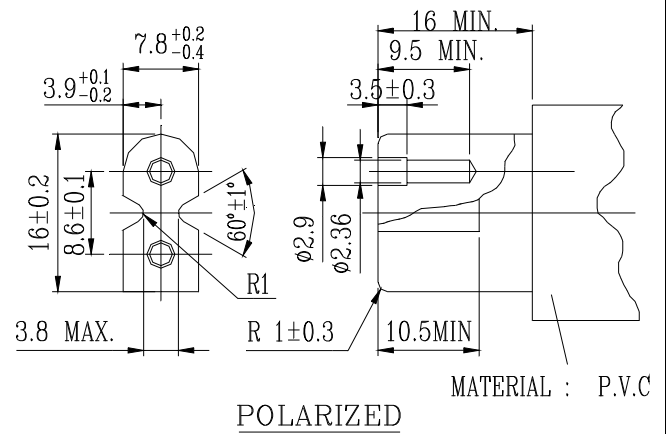
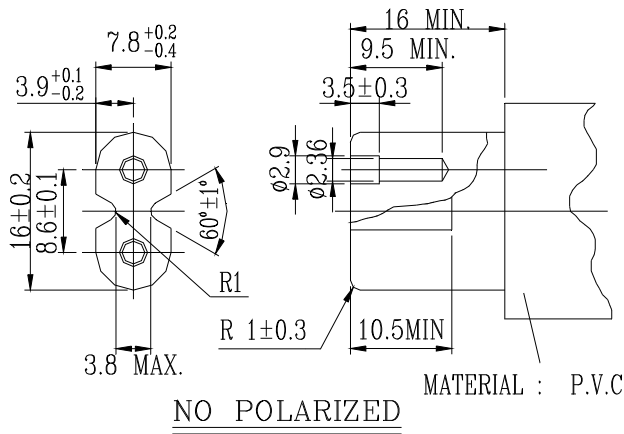
5. Endurance test sequence :

Test sequence		Test group									
		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	3
3.1	Operating force	4,9				4	4,8	4,8	4,8	4,8	4,8
3.2	Terminal Strength	5									
3.3	Strength of tapping part		1								
3.4	Body strength			1							
4.1	Solderability				1						
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	Composite temperature / humidity cyclic test									5	
4.7	Life test										5

Test sample quality : 2 pcs min. / group

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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 :

