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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 70°C

Operating Temperature Range: -10°C to 60°C

ISSUE	DATE	WRN	CHKD	APVD	DESCRIPTIONS
	2008.07.09	PATRICK	JOHNSON	Dick	

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2. Electrical characteristics

	Item	Condition	Specifications
1	Rated voltage/ Rated current		AC 100V 1A or DC 12V 2A MAX.
2	Dielectric strength	Conductors which should not make contact under normal conditions. 250V AC r.m.s (50 to 60Hz) for 1 minute. (trip current : 2mA)	Without breakdown
3	Insulation resistance	A voltage of 250V DC shall be applied for one minute. Conductors which should not make contact under normal conditions after which measurement shall be made.	50M Ω MIN.
4	Contact resistance	Measurement shall be made at 1000Hz with small current : 50mA	
		Pin— Contact	30m Ω MAX.
		Plug cover— Socket	50m Ω MAX.

3. Mechanical characteristics

	Item	Condition	Specifications
1	Operating force	Insertion force	44.1N (4.5kgf) MAX
		Withdrawal force	8.82N~29.4N (0.9~3kgf)
2	Contact pull strength	Contact shall withstand a steady strength pull of 2kg in the direction of contact breakout for 20 seconds.	Without parting
3	Terminal strength	Every terminal shall be capable of withstand a force of 9.8N (1kgf)	Without losing and breakdown, but deformation of terminal is authorized.

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4. Endurance characteristics

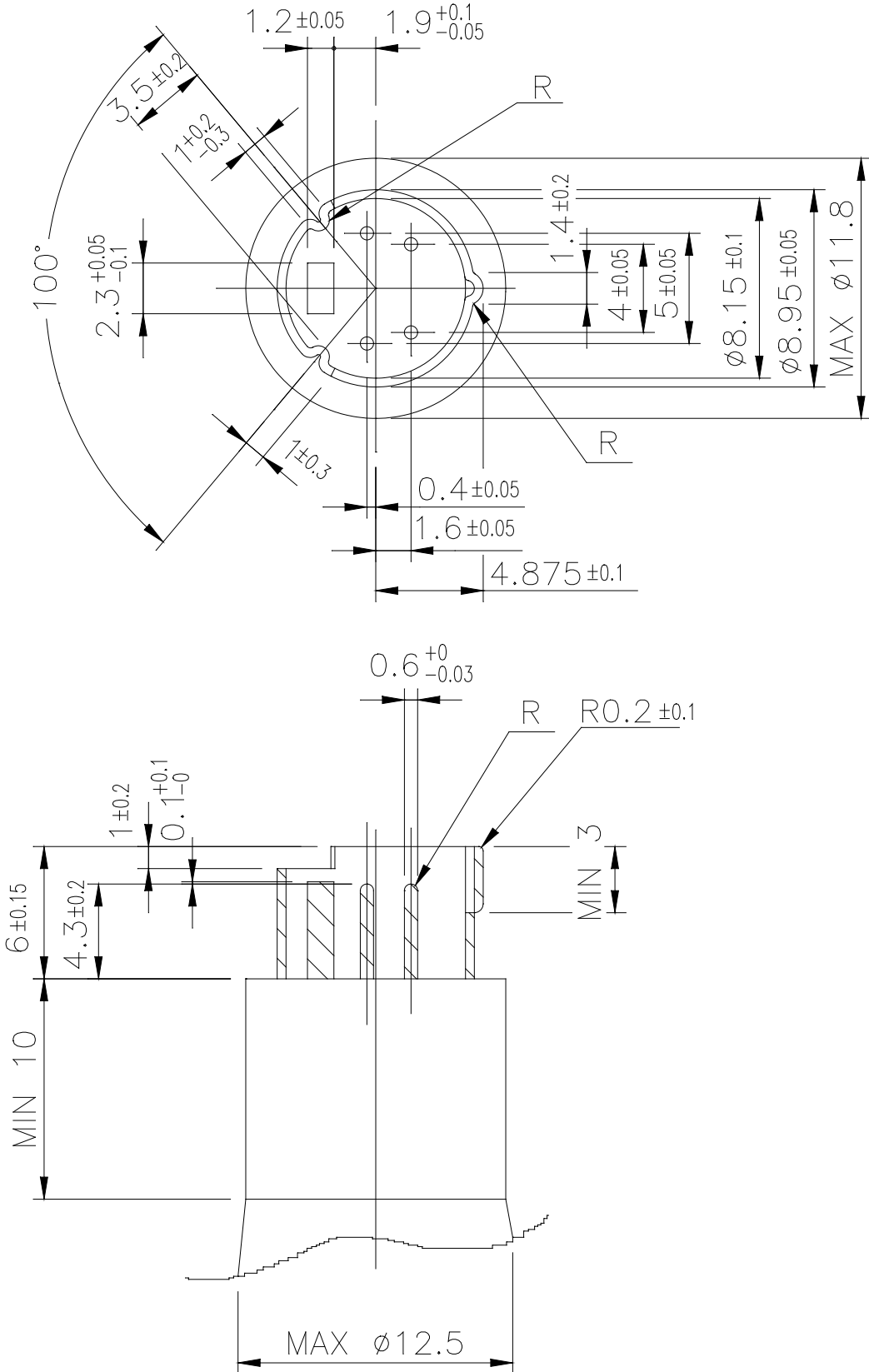
	Item	Condition	Specifications
1	Operating endurance	The S-Jack shall be subject to 1,000 cycles, at the rate of 10~20 cycles per minute.	Dimensional requirements, electrical and mechanical characteristics shall be satisfied.
		Pin – Contact	80mΩ MAX.
		Plug cover – Socket	100mΩ MAX.
2	Humidity test	The S-Jack shall be stored at 90% ~95% RH, 40°C±3°C for 96 hours. Then shall be maintained at room ambient conditions for a period of 1~2 hours.	Dimensional requirements, electrical and mechanical characteristics shall be satisfied.
		Pin – Contact	80mΩ MAX.
		Plug cover – Socket	100mΩ MAX.
		Insulation resistance	1MΩ MIN.
3	Dry heat	The S-Jack shall be stored at a temperature of 70±3°C for 96 hours, Then the jack shall be maintained at room ambient conditions for 1~2 hours.	Electrical and mechanical characteristic shall be satisfied.
		Pin – Contact	200mΩ MAX.
		Plug cover – Socket	500mΩ MAX.
		Insulation resistance	10MΩ MIN.
4	Soldering test	Temperature of solder : 250°C±5°C 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.

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Item	Condition	Specifications		
5	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 (ts min to max)		120°C (Ts1 max)	110°C (Ts min) 150°C (Ts max) 75 sec
	Peak/Classification Temperature		165°C (Tp1)	260°C ±5°C (Tp)
	Time within 5°C of actual Temperature (tp)			10 sec (within 2 times every time 2-3 sec)
	Time 25°C to Peak temperature			3 minutes max
	Resistance to Soldering Heat Test	Wave Soldering Temperature Profile are as below		
	<p>Temperature vs Time graph showing wave soldering profiles for Topside PCB (dashed red line) and Padside PCB (solid blue line). The graph includes a preheat phase (ts) and a peak phase (tp) with a 2-3 second dwell. Key temperature points are labeled: Tp, Ts max, Ts min, Tp1 max, and 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		44.1N (4.5kgf) MAX.		
Withdrawal force		8.82N~29.4N (0.9~3kgf)		

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5. Standard plug



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6. Test Group

Test of Examination	Test Group						
	A	B	C	D	E	F	G
	Test Sequence						
Examination of product	1	1	1	1	1	1	1
2-2 Dielectric strength			2,7	2,7	2,7		
2-3 Insulation resistance			3,8	3,8	3,8		
2-4 Contact resistance			4,,9	4,,9	4,,9		
3-1 Operating force			5,10	5,10	5,10		
3-2 Contact pull strength	2						
3-3 Terminal strength		2					
4-1 Operating endurance			6				
4-2 Humidity test				6			
4-3 Dry heat					6		
4-4 Soldering test						2	
4-5 Resistance to Soldering Heat Test							2

*Test sample : 2 ~ 4 pcs / group