

The subject products should meet the following requirements when tested under the condition of involving all circuits with terminals crimped on the specified maximum size wire.

1. Electrical Performance

	Item	Test Condition	Requirement
1-1	Rated voltage and current		AC <u>250</u> V <u>3</u> A DC <u>250</u> V <u>3</u> A
1-2	Contact resistance	Between both ends of mated terminals Dry Circuit of DC 50mV max. 50mA max.	<u>20</u> mΩ max.
1-3	Dielectric strength	When applied AC <u>1000</u> V 1 min. between adjacent terminals or ground.	No change
1-4	Insulation resistance	When applied DC 500V between adjacent terminals or ground	<u>1000</u> MΩ min.

2. Mechanical Performance

	Item	Test Condition	Requirement	
2-1	Insertion force	Mating speed: 25±3mm/min.	See para 7	
2-2	Extraction force	Disengaging speed: 25±3mm/min.	See para 7	
2-3	Durability	When mated up to 30 cycles by the rate of 10 cycles per min.	Contact resistance	Less than twice of initial
			Insertion extraction force	See para 7
2-4	Terminal retention force	Pull speed: 25±3mm/min.	<u>1.0</u> Kg min.	
2-5	Terminal strength	When applied a load of 500g, 1 min. to the product to be soldered.	No damage	

3. Environmental Performance

	Item	Test Condition	Requirement	
3-1	Temperature rise	When carried the rated current	30 deg. C max.	
3-2	Vibration	1.5mm, 10-55-10Hz/min., each 2 hrs. for X, Y, & Z directions, applying 1mA-DC current	Contact resistance	Less than twice of initial
			Discontinuity	1 micro sec. max.
			Appearance	No damage
3-3	Shock	50G, each 3 times for X, Y, Z directions, applying 1mA-DC current	Discontinuity	1 micro second max.
			Appearance	No damage
3-4	Solderability	Soldering time: 3±0.5 sec. Soldering pot : 230±5°C	Min. 3/4 of Immersed area	

	Item	Test Condition	Requirement	
3-5	Resistance to Soldering Heat (solder type only)	Solder time: 5 ± 0.5 sec Solder pot: $260 \pm 5^\circ\text{C}$	No damage	
3-6	Heat Resistance	$85 \pm 2^\circ\text{C}$, 2hrs.	No damage	
3-7	Humidity	$40 \pm 2^\circ\text{C}$, 90-95% RH, 96hrs. Measurement must be taken within 30 min. after tested.	Contact Resistance	Less than twice of initial
			Dielect. Str.	To pass para 1-3
			Insulation Resistance	100 M Ω min.
			Appearance	No Change
3-8	Temperature Cycling	One cycle consists of (1) $-55 \pm 3^\circ\text{C}$, 30 min. (2) Room temp. 10-15 min. (3) $105 \pm 2^\circ\text{C}$, 30 min. (4) Room temp. 10-15 min.	Contact Resistance	Less than twice of initial
			Appearance	No damage
3-9	Salt Spray	Temp: $35 \pm 2^\circ\text{C}$, Solution: $5 \pm 1\%$, Spray time: 48 ± 4 hrs. Measurement must be taken after water rinse.	Contact Resistance	Less than twice of initial
			Appearance	No significant corrosion
3-10	SO ₂ Gas	24 hrs. in sulfur dioxide gas (SO ₂) 50 ± 5 ppm at $40 \pm 2^\circ\text{C}$	Contact Resistance	Less than twice of initial
3-11	NH ₄ Gas	40 min. in saturated ammonia gas by 28% liquid ammonia at $25 \pm 2^\circ\text{C}$	Contact Resistance	Less than twice of initial
			Appearance	No damage

4. Terminal To Be Used

	Customer P/N	Molex P/N	Wire Size	Ins. Dia.
1.				
2.				
3.				
4.				
5.				

5. Ambient Temperature Range: $-40^\circ\text{C} \sim 105^\circ\text{C}$

6. Construction, Dimension and Material:

Specified by the attached drawing.

