

MODULAR JACK, RJ45, SINGLE, ENTRY, DIP TYPE**1. INTRODUCTION****1.1. Purpose**

Testing was performed on the Tyco **MODULAR JACK, RJ45, SINGLE, ENTRY, DIP TYPE** to determine its conformance to the requirements of Product Specification **108-57535 Rev. B**.

1.2. Scope

This report covers the electrical, mechanical, and environmental performance of the **MODULAR JACK, RJ45, SINGLE, ENTRY, DIP TYPE** Connector.

1.3. Conclusion

MODULAR JACK, RJ45, SINGLE, ENTRY, DIP TYPE Connector meets the electrical, mechanical, and environmental performance requirements of Product Specification **108-57535 Rev. B**.

1.4. Product Description

MODULAR JACK, RJ45, SINGLE, ENTRY, DIP TYPE Connector is designed for printed circuit board applications. The contacts are copper alloy, gold plated on the contact interface and Tin plating on the soldertail, all over nickel under-plated. The housing material is glass filled insulating polymer, UL94V-0.

1.5. Test samples

The test samples were randomly selected from normal current production lots, and the following part numbers were used for test :

Test Group	Quantity	Description
A, B, C, D, E, F, G	5ea.	MODULAR JACK, RJ45, SINGLE, ENTRY, DIP TYPE

DR	DATE	CHK	DATE
Oblic Hu	04-May-2006	Wei-Jer Ke	04-May-2006

1.6. Qualification Test Sequence

Test or Examination	Test Group						
	A	B	C	D	E	F	G
	Test Sequence (a)						
Examination of Product	1, 7	1, 7	1, 5	1, 5	1, 5	1,3	1,3
Contact Resistance		2, 6	2, 4	2, 4	2, 4		
Dielectric withstanding Voltage	3, 6						
Insulation Resistance	2, 5						
Mating Force		3, 5					
Durability		4					
Solderability							2
Resistance to Soldering Heat						2	
Humidity Test	4		3				
Temperature Life				3			
Salt Spray					3		

Figure 1.

NOTE : (a) Numbers indicate sequence in which tests are performed.

2. TEST RESULT

GP	TEST	SPEC.	DATA			
			Max.	Min.	Mean	σ
A	Insulation Resistance	500 M Ω Min.	OK	OK	OK	--
	Dielectric withstanding Voltage	No creeping discharge or flashover shall occur.	OK	OK	OK	--
	Humidity Test	40 °C \pm 2 °C , 95% for 96 hours	OK	OK	OK	--
	Insulation Resistance	200 M Ω Min.	OK	OK	OK	--
	Dielectric withstanding Voltage	No creeping discharge or flashover shall occur.	OK	OK	OK	--
	Appearance	No Damaged	OK	OK	OK	--
B	Contact Resistance	40 m Ω Max.	10.7	9.1	10.0	0.61
	Mating Force	8 Contacts 2.3 Kgf Max.	1.80	1.67	1.73	0.05
	Durability	750 Cycle	OK	OK	OK	--
	Mating Force	8 Contacts 2.3 Kgf Max.	1.73	1.59	1.66	0.06
	Contact Resistance	50 m Ω Max.	12.6	10.7	11.7	0.78
	Appearance	No Damaged	OK	OK	OK	--
C	Contact Resistance	40 m Ω Max.	11.1	9.9	10.4	0.48
	Humidity Test	40 °C \pm 2 °C , 95% for 96 hours	OK	OK	OK	--
	Contact Resistance	50 m Ω Max.	12.5	10.7	11.7	0.75
	Appearance	No Damaged	OK	OK	OK	--
D	Contact Resistance	40 m Ω Max.	11.0	9.9	10.4	0.45
	Temperature Life	85°C 250Hr	OK	OK	OK	--
	Contact Resistance	50 m Ω Max.	12.9	11.3	12.0	0.59
	Appearance	No Damaged	OK	OK	OK	--
E	Contact Resistance	40 m Ω Max.	10.8	9.3	10.0	0.55
	Salt Spray	35°C , 5%Salt, 48hours	OK	OK	OK	--
	Contact Resistance	50 m Ω Max.	12.6	11.0	11.8	0.61
	Appearance	No Damaged	OK	OK	OK	--
F	Resistance to Reflow Soldering Heat	260 \pm 5°C , 20~40sec.	OK	OK	OK	--
	Appearance	No Damaged	OK	OK	OK	--
G	Solderability	95% coverage	OK	OK	OK	--
	Appearance	No Damaged	OK	OK	OK	--

Figure 2.