

MODULAR JACK, RJ45, LOW PROFILE, V/R**1. INTRODUCTION****1.1. Purpose**

Testing was performed on the Tyco **MODULAR JACK, RJ45, LOW PROFILE, V/R** to determine its conformance to the requirements of Product Specification **108-57535 Rev. O**.

1.2. Scope

This report covers the electrical, mechanical, and environmental performance of the **MODULAR JACK, RJ45, LOW PROFILE, V/R** Connector.

1.3. Conclusion

MODULAR JACK, RJ45, LOW PROFILE, V/R Connector meets the electrical, mechanical, and environmental performance requirements of Product Specification **108-57535 Rev. O**.

1.4. Product Description

MODULAR JACK, RJ45, LOW PROFILE, V/R 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, H, I	5ea.	MODULAR JACK, RJ45, LOW PROFILE, V/R

DR	DATE	CHK	DATE
Oblic Hu	24-Dec-2004	Wei-Jer Ke	24-Dec-2004
FZ00-0318-04			

1.6. Qualification Test Sequence

Test or Examination	Test Group								
	A	B	C	D	E	F	G	H	I
	Test Sequence (a)								
Examination of Product	1, 7	1, 7	1, 5	1, 5	1, 5	1, 5	1, 5	1, 3	1,3
Contact Resistance		2, 6	2, 4	2, 4	2, 4	2, 4	2, 4		
Dielectric withstanding Voltage	3, 6								
Insulation Resistance	2, 5								
Temperature Rising								2	
Mating Force		3, 5							
Durability		4							
Vibration			3						
Solderability									3
Resistance to Soldering Heat									
Thermal Shock				3					
Humidity Temperature Cycling	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	Appearance	No Damaged	OK	OK	OK	--
	Insulation Resistance	500 M Ω Min.	OK	OK	OK	--
	Dielectric withstanding Voltage	1KV between adjacent contacts and 1.5KV between contacts and shield for 1minute.	OK	OK	OK	--
	Humidity Temperature Cycling	25-65°C, 95%, 10cycle	OK	OK	OK	--
	Insulation Resistance	200 M Ω Min.	OK	OK	OK	--
	Dielectric withstanding Voltage	1KV between adjacent contacts and 1.5KV between contacts and shield for 1 minute.	OK	OK	OK	--
	Appearance	No Damaged	OK	OK	OK	--
B	Appearance	No Damaged	OK	OK	OK	--
	Contact Resistance	40 m Ω Max.	14.8	13.1	13.8	0.70
	Mating Force	8 Contacts 2.3 Kgf Max.	1.82	1.71	1.77	0.04
	Durability	10,000 Cycle	OK	OK	OK	--
	Mating Force	8 Contacts 2.3 Kgf Max.	1.74	1.62	1.69	0.04
	Contact Resistance	50 m Ω Max.	15.6	14.5	15.1	0.45
	Appearance	No Damaged	OK	OK	OK	--
C	Appearance	No Damaged	OK	OK	OK	--
	Contact Resistance	40 m Ω Max.	14.4	13.2	13.8	0.46
	Temperature Life	85°C 250Hr	OK	OK	OK	--
	Contact Resistance	50 m Ω Max.	15.8	14.6	15.2	0.51
	Appearance	No Damaged	OK	OK	OK	--
D	Appearance	No Damaged	OK	OK	OK	--
	Contact Resistance	40 m Ω Max.	14.7	13.5	14.2	0.48
	Thermal Shock	-55°C, +85°C 5 Cycle	OK	OK	OK	--
	Contact Resistance	50 m Ω Max.	16.2	15.1	15.7	0.47
	Appearance	No Damaged	OK	OK	OK	--
E	Appearance	No Damaged	OK	OK	OK	--
	Contact Resistance	40 m Ω Max.	14.3	13.4	13.9	0.36
	Humidity Temperature Cycling	25-65°C, 95%, 10cycle	OK	OK	OK	--
	Contact Resistance	50 m Ω Max.	15.9	14.7	15.2	0.46
	Appearance	No Damaged	OK	OK	OK	--

Figure 2 (Cont.)

GP	TEST	SPEC.	DATA			
			Max.	Min.	Mean	σ
F	Contact Resistance	40 m Ω Max.	14.8	13.3	14.1	0.59
	Temperature Life	85°C 250Hr	OK	OK	OK	--
	Contact Resistance	50 m Ω Max.	16.3	14.9	15.7	0.59
	Appearance	No Damaged	OK	OK	OK	--
G	Contact Resistance	40 m Ω Max.	14.4	13.0	13.8	0.56
	Salt Spray	35°C, 5%Salt, 48hours	OK	OK	OK	--
	Contact Resistance	50 m Ω Max.	15.8	14.6	15.2	0.48
	Appearance	No Damaged	OK	OK	OK	--
H	Resistance to Solder Heat	210°C, 30sec Max, Peak 235°C	OK	OK	OK	--
	Appearance	No Damaged	OK	OK	OK	--
I	Solderbility	235°C, 5sec	OK	OK	OK	--
	Appearance	No Damaged	OK	OK	OK	--

Figure 2 (End)