

COMPACT FLASH CARD, 1.27mm(.050") PITCH

1. INTRODUCTION

1.1. Purpose

Testing was performed on the Tyco **COMPACT FLASH CARD, 1.27mm(.050") PITCH** to determine its conformance to the requirements of Product Specification **108-57134 Revision B**.

1.2. Scope

This report covers the electrical, mechanical, and environmental performance of the **COMPACT FLASH CARD, 1.27mm(.050")**.

1.3. Conclusion

The **COMPACT FLASH CARD, 1.27mm(.050") Connector** meets the electrical, mechanical, and environmental performance requirements of Product Specification **108-57134 Revision B**.

1.4. Product Description

The **COMPACT FLASH CARD, 1.27mm(.050") 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.	COMPACT FLASH CARD, 1.27mm(.050")

DR	DATE	APVD	DATE
Oblic Hu	12-Aug-2005	Wei-Jei Ke	12-Aug-2005
P-05-000084			

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, 9	1, 6	1, 5	1, 5	1, 5	1, 5	1, 3	1, 3
Contact Resistance		2, 8	2, 5	2, 4	2, 4	2, 4	2, 4		
Dielectric withstanding Voltage	3, 6								
Insulation Resistance	2, 5								
Mating Force		3, 7							
Unmating Force		4, 6							
Durability		5							
Vibration			3						
Mechanical Shock			4						
Contact Retention Force								4	
Solderability									2
Resistance to Soldering Heat								2	
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	Insulation Resistance	1000 M Ω Min.	OK	OK	OK	--
	Dielectric withstanding Voltage	500 VAC 1Minute	OK	OK	OK	--
	Humidity Temperature Cycling	25-65 $^{\circ}$ C ,95%,10cycle	OK	OK	OK	--
	Insulation Resistance	1000 M Ω Min.	OK	OK	OK	--
	Dielectric withstanding Voltage	500 VAC 1Minute	OK	OK	OK	--
	Appearance	No Damaged	OK	OK	OK	--
B	Contact Resistance	40 m Ω Max.	28.58m Ω	26.24m Ω	27.46m Ω	--
	Mating Force	2.94 kgf Max	1.28kg	1.12kg	1.16kg	--
	Unmating Force	0.5 kgf Min	1.11kg	0.972kg	1.52kg	--
	Durability	1000 Cycle	2.26kg	1.01kg	1.64kg	--
	Unmating Force	0.5 kgf Min	2.31kg	2.18kg	2.22kg	--
	Mating Force	2.94 kgf Max	2.48kg	2.22kg	2.34kg	--
	Contact Resistance	40 m Ω Max.	28.82m Ω	26.68m Ω	27.74m Ω	--
	Appearance	No Damaged	OK	OK	OK	--
C	Contact Resistance	40 m Ω Max.	28.56m Ω	26.60m Ω	27.42m Ω	--
	Vibration	10-55-10 Hz	OK	OK	OK	--
	Mechanical Shock	50G, 11mSec	OK	OK	OK	--
	Contact Resistance	40 m Ω Max.	28.64m Ω	26.83m Ω	27.76m Ω	--
	Appearance	No Damaged	OK	OK	OK	--
D	Contact Resistance	40 m Ω Max.	28.72m Ω	26.41m Ω	27.42m Ω	--
	Thermal Shock	-55 $^{\circ}$ C , +85 $^{\circ}$ C 5 Cycle	OK	OK	OK	--
	Contact Resistance	40 m Ω Max.	29.61m Ω	27.15m Ω	28.67m Ω	--
	Appearance	No Damaged	OK	OK	OK	-
E	Contact Resistance	40 m Ω Max.	28.18m Ω	26.36m Ω	27.37m Ω	-
	Humidity Temperature Cycling	25-65 $^{\circ}$ C , 95%, 10cycle	OK	OK	OK	-
	Contact Resistance	40 m Ω Max.	32.64m Ω	27.48m Ω	28.43m Ω	-
	Appearance	No Damaged	OK	OK	OK	-

Figure 2 (Con.)

GP	TEST	SPEC.	DATA			
			Max.	Min.	Mean	σ
F	Contact Resistance	40 m Ω Max.	28.53m Ω	26.48m Ω	27.52m Ω	--
	Temperature Life	85°C 250Hr	OK	OK	OK	--
	Contact Resistance	40 m Ω Max.	29.58m Ω	26.87m Ω	28.72m Ω	--
	Appearance	No Damaged	OK	OK	OK	--
G	Contact Resistance	40 m Ω Max.	28.67m Ω	26.16m Ω	27.32m Ω	--
	Salt Spray	35°C, 5%Salt, 48hours	OK	OK	OK	--
	Contact Resistance	40 m Ω Max.	31.68m Ω	28.74m Ω	29.62m Ω	--
	Appearance	No Damaged	OK	OK	OK	--
H	Resistance to Solder Heat	No Damaged	OK	OK	OK	--
	Appearance	No Damaged	OK	OK	OK	--
	Contact Retention Force	1kg MIN.	2.0kg	2.0kg	2.0Kg	--
I	Solderbility	235°C, 5sec	OK	OK	OK	--
	Appearance	No Damaged	OK	OK	OK	--

Figure 2 (End)