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1. SCOPE

This specification covers performance, tests and quality requirements for the memory stick connector.

2. Applicable Documents

The following documents form a part of this specification to the extent specified herein. In the event of conflict between requirements of this specification and the product drawing, the product drawing shall take precedence. In the event of conflict between requirements of this specification and referenced documents, this specification shall take precedence.

3. MECHANICAL Requirements 3.1 DESIGN AND CONSTRUCTION

Product shall be of design, construction and physical dimensions specified on applicable product drawing.

3.2 MATERIAL AND FINISH

See Sales Drawing

3.3 RATING

3.3.1. Voltage: 125V AC.

3.3.2. Current: 0.5 Ampere max.

3.3.3. Operating temperature: -55°C to +85°C.

Relative humidity: 95% max. (non-condensing)

4. TEST CONDITION

The product is designed to meet the electrical, mechanical and environmental performance requirements specified. All the tests shall be performed in the room temperature(5°C~35°C), relative humidity(45~85%), air pressure(85~106Kpa), unless otherwise specified.

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5. TEST REQUIREMENTS AND PROCEDURES SUMMARY

no	test description	requirement	procedured			
1	Examination of	Meets the requirements of product	Visually, dimensionally and functionally			
1	product	drawing	inspected per applicable inspection plan.			
		Electrical				
2	LOW LEVEL CONTACT RESISTANCE	70 m Max initial 80 m Max final	Mate connectors measure by dry circuit. 20 mV Max. 10 mA.			
3	Dielectric Withstanding Voltage	500VAC initial and 250 VAC final at sea level for 1 minute. No discharge, flashover or breakdown. Current leakage: 1mA max	Test between adjacent contacts of mated/unmated connectors. MIL-STD-1344A, Method 3001.1 Test Condition I			
4	Insulation Resistance	1000M min	Mate connectors. Apply 500 V DC between adjacent contact and ground EIA-364-21			
5.	Temperature Rising	Base upon 30 Max. Rise above ambient temperature	Carry rated current load.			
		MECHANICAL				
6	Card Insertion Force	10N max	Insert connectors at the speed rate of 25±3 mm/min.			
7	Card Extraction Force	1.4N min	Insert connectors at the speed rate of 25±3 mm/min.			
8	Contact retention force	2N min	Apply axial pull out force at 25±3 mm/min on the assembly in the housing.			
9	Durability	12000 cycles After test, insulation resistance, dielectric strength, contact resistance shall be satisfied.	Mate and Un-mate the connector for a total of 12000 cycles (Operation speed: 1 cycles/sec) The card shall be changed new one in ea 5000 times.			

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PRODUCT SPECIFICATION



			Accelerated Velocity:50G Wave form:				
		No electrical discontinuity of 1	Half-sine, Duration: 11msec. Three				
10	Mechanical Shock	Microsecond or longer duration.	shocks in each direction shall be applied				
10	Micenanical Shoek	R=10m maximum	along the three mutually perpendicular				
		No physical damage allowed	axes of the test specimen (18 shocks).				
			MIL-STD-202, method 213, Condition B.				
		ENVIRONMENTAL					
11	II D	R=10m maximum	Mated connector, $85 \pm 3^{\circ}$ C, 250 Hrs.				
11	Heat Resistance	No physical damage allowed	EIA 364-17				
12	Cool Resistance	R=10m maximum	Mated connector, $-55 \pm 3^{\circ}$ C, 96 Hrs.				
12		No physical damage allowed	EIA 364-17				
		R-10m maximum	Mated connector, $90 \sim 95\%$ R.H. $40 \pm 2^{\circ}$ C,				
13	Humidity	No physical damage allowed	96 Hrs.				
		no physical damage anowed	EIA-364-31B&IEC-60512-11-3.				
			Amplitude : 1.5mm P-P,				
	Vibration	No electrical discontinuity of 1	Sweep time :10-55-10 Hz in 1min.				
14		Microsecond or longer duration.	Duration : 1.5 hours in each of 3				
14		R=10m maximum	mutually perpendicular planes.				
		No physical damage allowed	MIL-STD-1344A,Method 2005.1,				
			Condition V Test Condition letter A.				
15		Contact maisteneou?0m May	Mated connector, 3PPM H ₂ S, 40°C, 80%				
15	$Gas(H_2S)$	Contact resistance: som Max.	RH, 96 hours.				
	Desistance to ID		Temperature:100~150 for 60s Min, 210				
16	Resistance to IR	No physical damage allowed	for 30s Max, peak:230 ,				
	renow		MIL-STD-202, Method 210				
17	Solder ability	Wat solder coverage: 05% min	Solder temperature: 230±2°C				
17	Solder ability	wet solder coverage. 95% mm.	Immersion duration: 3 seconds max.				
			Mated connector				
18	Temperature	R=10m maximum	-55±3°C/30 min, room temp: 10~15 min				
10	Cycling	No physical damage allowed	85±2°C/30 min, room temp: 10~15 min				
			making this a cycle, repeat 5 cycles				

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19	Salt Sprav	By visual inspection, without	48±4 Hrs exposure to a salt spray from the
	Salt Splay	noticeable rust	$5\pm1\%$ solution at $35\pm2\degree$ C

6. Product Qualification and Requalification test sequence

]	Cest (Frou	р				
	Test of Examination	1	2	3	4	5	6	7	8	9	10	11	12
		Test Sequence											
1	Examination of product	1,9	1,9	1,9	1,5	1,5	1,9	1,3	1,6	1,3	1,9	1,4	1,5
2	Low Level Contact Resistance	2,6	2,6	2,6	2,4	2,4	2,6		2.5		2,6		2,4
3	Dielectric Withstanding Voltage	4,8	4,8	4,8			4,8				4,8		
4	Insulation Resistance	3,7	3,7	3,7			3,7				3,7		
5	Temperature Rising												3
6	Card Insertion Force (max.)											2	
7	Card Extraction Force (min)											3	
8	Contact retention Force(min)					6							
9	Durability										5		
10	Mechanical Shock								4				
11	Heat Resistance	5											
12	Cool Resistance		5										
13	Humidity			5									
14	Vibration								3				
15	Gas (H ₂ S)				3								
16	Resistance to IR reflow									2			
17	Solderability							2					
18	Temperature Cycling	_					5						
19	Salt Spray					3							

Figure 2

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7. Sample Selection:

Sample shall be prepared in accordance with applicable manufactures instructions and shall be selected at random form current production



Figure 3: Low-level Termination Resistance Measurement

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