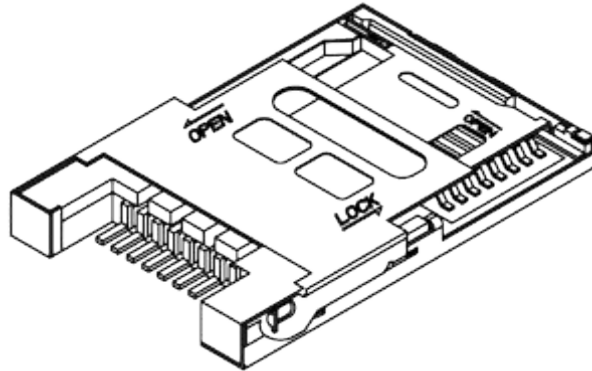


PRODUCT SPECIFICATION

Part Number	MES3055	Rev	A	Date	11/06/09		
Product Description	T-Flash Memory Card, Hinged + SIM Card (6-Pin), Hinged (2-in-1 Combo Connector)			Page	1		
Doc Number	MES3055	Prepared	BW	Checked	PN	Approved	DR



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PRODUCT SPECIFICATION

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1.0 SCOPE.

This specification covers performance, tests and quality requirements for the 2-in-1 Combo Connector MS3055 (T-Flash Hinged + SIM 6-Pin Hinged).

2.0 PRODUCT NAME AND PART NUMBER.

T-Flash Memory Card Connector, hinged plus SIM Card Hinged Type: MEM3055.

3.0 PRODUCT SHAPE, DIMENSIONS AND MATERIAL.

Please refer to drawings.

4.0 RATINGS.

- 4.1 Current rating 0.5A DC (per pin)
- 4.2 Voltage rating 100 Volts DC/AC(RMS)
- 4.3 Operating Temperature Range -25°C TO +70°C
- 4.4 Storage Temperature -40°C TO +70°C

5.0 TEST AND MEASUREMENT CONDITIONS.

Product is designed to meet electrical, mechanical and environmental performance requirements specified in Paragraph 6.0. All tests are performed in conditions shown below unless otherwise specified.

- Temperature 15°C ~ +35°C
- Relative Humidity 45% ~ 75% R.H.

6.0 PERFORMANCE.

Item	Test Condition	Requirement
Examination of Product	Visual, dimensional and functional inspection as per quality plan.	Product shall meet requirements of product drawing and specification.

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6.1 Electrical Performance.

Item	Test Condition	Requirement
Contact Resistance	Measure and record contact resistance of mated connector using test current of 100mA max and 20 mV open circuit voltage in accordance with MIL-STD-1344A, method 3002.1.	30 mΩ Initial Less than 40 mΩ at end of test
Insulation Resistance	Apply 100Volts DC between adjacent contacts of mated connectors for one minute in accordance with MIL-STD-1344 A, method 3003.1.	Greater than 1000 MΩ
Dielectric Strength	Mate connectors and apply 200 V AC for 1 minute between adjacent terminal ground in accordance with MIL-STD-1344A, method 3001.1.	No creeping discharge or flash over. Greater than 1000 MΩ

6.2 Mechanical Performance.

Item	Test Condition	Requirement
Contact force	Apply axial pull out force on the connector assembled in the housing at a speed: 25±3 mm/minute over a distance of 0.6mm.	15 to 70gf/ pin
Durability	The connector should be mated and unmated for 5000 cycles with 0.6mm travel in accordance with of MIL-STD-1344A, Method 2016.	No evidence of physical damage. Contact Resistance ≤ 30mΩ at end of test .
Vibration	Subject mated connectors to 10 to 55 to 10 Hz frequency span over 1 minute at a 1.52mm amplitude. Test to be conducted on 3 mutually perpendicular planes for 2hrs each with 10mA applied and in accordance EIA-364-28A.	No electrical discontinuity greater than 10 μ sec. shall occur. No damage to product. Contact Resistance ≤ 30mΩ at end of test .
Mechanical Shock	Apply 5V DC and 100mA to all contacts and subject the part to a 490 m/s ² half sine wave acceleration for 11 ms. Three shocks to be applied in each of the X, Y and Z planes and in both directions. A total of 18 shocks and in accordance with EIA-364-27.	No electrical discontinuity greater than 1 μ sec. shall occur. No damage to product. Contact Resistance ≤ 30mΩ at end of test .

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6.3 Environmental Performance and Others.

Item	Test Condition	Requirement	
Thermal Shock	Mate Connector and perform the following thermal cycle -55+/-3°C for 30 minutes. +25°C for 5 minutes. +85+/-2°C for 30 minutes. +25°C for 5 minutes. Repeat for 5 cycles.	No evidence of physical damage, discharge, flashes or corrosion in contact areas. Contact Resistance Less than 60mΩ at end of test. Insulation Resistance greater than 1000MΩ at end of test.	
Humidity Test (Steady State)	Mate connector and expose to temperature of 40±2°C with 95% RH for 500hours then place in ambient temperature for 1 to 2 hrs. In accordance with EIA-364-31, method 3.		
Humidity Test (Cycling)	Mate connector and expose to temperature of 25 to 65°C and 90 to 98% RH for ten 24 hour cycles. In accordance with EIA-364-31A.		
Salt Water Spray	Subject mated connectors to 35±2°C and 5±1% salt condition for 48hours. Test in accordance with EIA-364-26A.		
Temperature Life (high)	Subject product to 60±2°C for 500 hours continuously.		
Temperature Life (low)	Subject product to -20±3°C for 500 hours continuously.		
Moisture Resistance	Subject product to 10 cycles of environmental profile shown in fig.2.		
Ageing test	Subject product to 93±3°C for 8hrs hours at a humidity of 95%,.		
Solderability	Dip solders tails into molten solder, held at a temperature of 245±5°C, for 5±0.5 seconds.		95% of immersed area must show no voids of pin holes.
Resistance to Reflow Soldering Heat.	Mount connector, place in reflow oven and expose to the temperature profile shown in fig. 2.		No evidence of physical damage or abnormalities adversely affecting performance.

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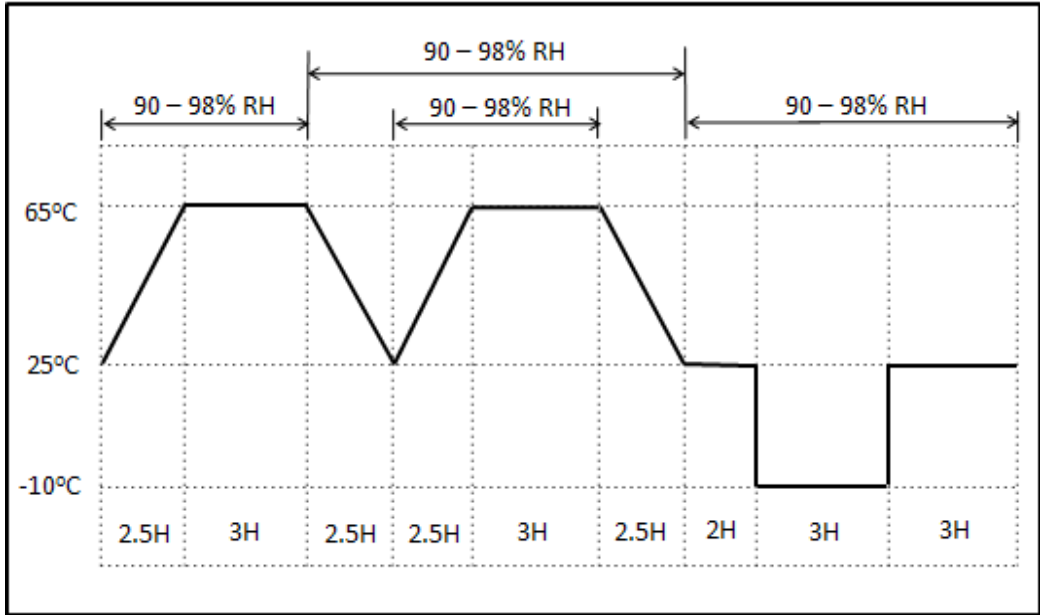


Fig.1 Moisture Resistance Profile – 1 Cycle

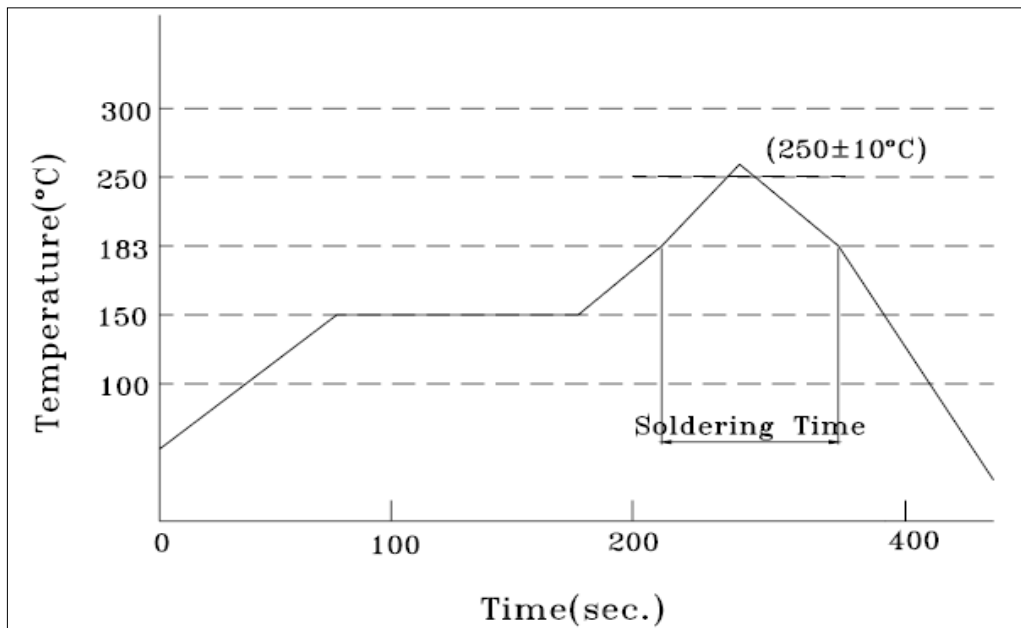


Fig.2. Recommended Reflow Temp. Profile

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7.0 PRODUCT QUALIFICATION AND TEST SEQUENCE

Test Item	Group													
	A	B	C	D	E	F	G	H	I	J	K	L	M	
Examination of Product	1,3	1,9	1,9	1,3	1,9	1,9	1,9	1,9	1,9	1,9	1,5	1,3	1,3	1,3
Contact Resistance		2,6	2,6		2,6	2,6	2,6	2,6	2,6	2,6	2,4			
Insulation Resistance		3,7	3,7		3,7	3,7	3,7	3,7	3,7	3,7				
Dielectric Withstanding Voltage		4,8	4,8		4,8	4,8	4,8	4,8	4,8	4,8				
Contact Normal Force	2													
Durability		5												
Shock			5											
Drop Test				2										
High Temperature Life					5									
Cold Temperature Life						5								
Humidity (Steady State)							5							
Humidity (Cycling)								5						
Thermal Shock									5					
Salt Spray										3				
Ageing Test											2			
Solderability												2		
Resistance to Soldering Heat													2	
Sample QTY.	5	5	5	1	5	5	5	5	5	5	5	5	5	5
The Number of Group is Test Sequence (Drop Test Sample QTY 1 Carton)														

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