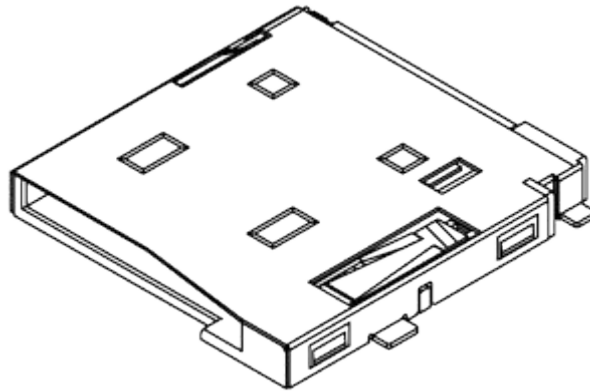


PRODUCT SPECIFICATION

Part Number	MEM2055	Rev	A	Date	11/06/09		
Product Description	T-Flash & Micro SD, Push-Push Type, Normal Open , Post 0.6mm				Page	1	
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PRODUCT SPECIFICATION

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1.0 SCOPE.

This specification covers performance, test and quality requirements for the T Flash and Micro SD Memory Card Connector Normally open Mem2055 (Push-Push Type, SMT, 0.6mm Profile.).

2.0 PRODUCT NAME AND PART NUMBER.

Memory Card Connector, Push-Push Type: Mem2055.

3.0 PRODUCT SHAPE, DIMENSIONS AND MATERIAL.

Please refer to drawings.

4.0 RATINGS.

- 4.1 Current rating 10mA Max.
- 4.2 Voltage rating 5 VDC
- 4.3 Operating Temperature Range -25°C to +85°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 ambient conditions unless otherwise specified.

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 10mA max and 20 mV open circuit voltage in accordance with MIL-STD-202.	Less than 80 mΩ initial Less than 100 mΩ at end of test
Insulation Resistance	Apply 500Volts DC between adjacent contacts of mated connectors for one minute in accordance with MIL-STD-202, Method 302, and Condition B.	Greater than 1000 MΩ
Dielectric Strength	Mate connectors and apply 500 V AC for 1 minute between adjacent terminal ground, in accordance with MIL-STD-202 method 301.	No creeping discharge or flash over. Current leakage less than 1 mA

6.2 Mechanical Performance.

Item	Test Condition	Requirement
Durability	The connector should be mated and unmated for 5000 cycles with 0.6mm travel.	No evidence of physical damage. Contact Resistance ≤100mΩ at end of test.
Vibration	Subject mated connectors to 10 to 55 to 10 Hz frequency span over 1 minute at a 1.5mm amplitude. Test to be conducted on 3 mutually perpendicular planes for 2hrs each with 10mA applied and in accordance with MIL-STD-202 Method 201.	No electrical discontinuity greater than 1 μ sec. shall occur. No damage to product. Contact Resistance ≤100mΩ at end of test.
Mechanical Shock	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 MIL-STD-202 Method 213	No electrical discontinuity greater than 1 μ sec. shall occur. No damage to product. Contact Resistance ≤100mΩ at end of test.

PRODUCT SPECIFICATION

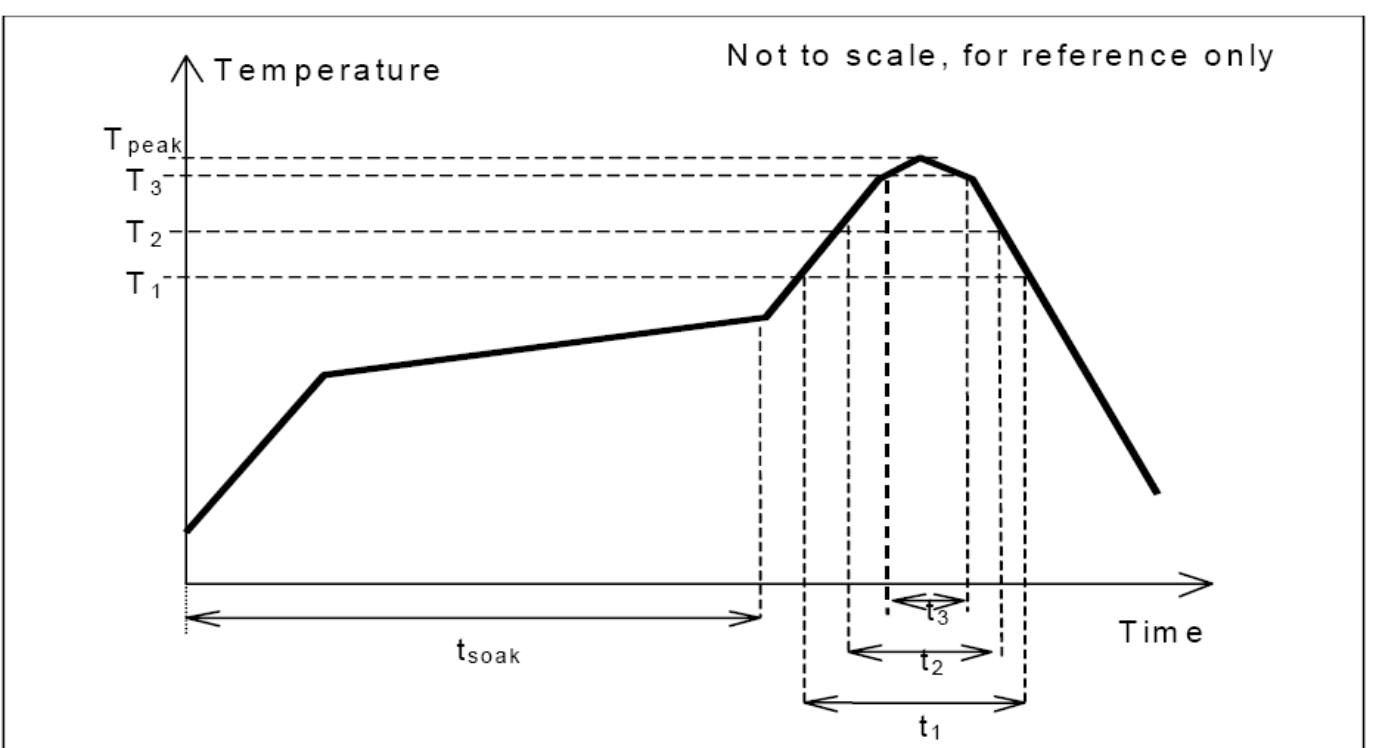
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6.3 Environmental Performance and Others.

Item	Test Condition	Requirement
Thermal Shock	Mate Connector and perform the following thermal cycle :- -55+/-3°C for 30 minutes. +85+/-2°C for 30 minutes. Repeat for 5 cycles in accordance with MIL-STD-202, Method 107D, condition A.	No evidence of physical damage, discharge, flashes or corrosion in contact areas. Contact Resistance Less than 100mΩ at end of test. Insulation Resistance greater than 1000Ω at end of test.
Humidity Test	Mate connector and expose to temperature of 40±2°C with 95% RH for 96 hours then place in ambient temperature for 1 to 2 hrs. In accordance with MIL-STD-202, Method 103.	
Salt Water Spray	Subject mated connectors to 35±2°C and 5±1% salt condition for 48hours. Test in accordance with MIL-STD-202, Method 101 Condition B.	
Temperature Life (High)	Subject product to 85 ± 2°C for 96 hours continuously in accordance with MIL-STD-202, Method 108.	
Solderability	Dip solders tails into molten solder, held at a temperature of 250±5°C for 4±1 seconds, in accordance with MIL-STD-202F.	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 1.0	No evidence of physical damage or abnormalities adversely affecting performance.
Temperature rise	Apply rated current load of 0.3A per contact in accordance with UL498.	30°C Max temperature rise.

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Parameter Reference Specification

- Average temperature gradient in preheating 2.5°C/s
- Soak time(t_{soak}) 2-3 minutes
- Time above 217°C t_1 60 s
- Time above 230°C t_2 50 s
- Time above 250°C t_3 5 s
- Peak temperature in reflow (t_{peak}) 255°C (-0/+5°C)
- Temperature gradient in cooling Max -5°C/s

This profile is the minimum requirement for evaluating soldering heat resistance of components. Heat transfer method used for reflow soldering is hot air convection. The actual air temperatures used to achieve the specified profile is higher and largely dependent on the reflow equipment.

Fig.1. 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
Examination of Product	1,7	1,4	1,5	1,5	1,10	1	1	1,9	1,9
Contact Resistance	2,6	2	2,4	2,4	2,8			2,6	2,6
Insulation Resistance	3				3,6,9			3,7	3,7
Dielectric Withstanding Voltage	4				4			4,8	4,8
Durability	5				4				
Temperature rise		3							
Vibration			3						
Mechanical shock				3		4			
Thermal Shock					5				
Humidity					7				
Solderability						2			
Resistance to soldering heat							2		
Salt Water Spray								5	
High temperature									5

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