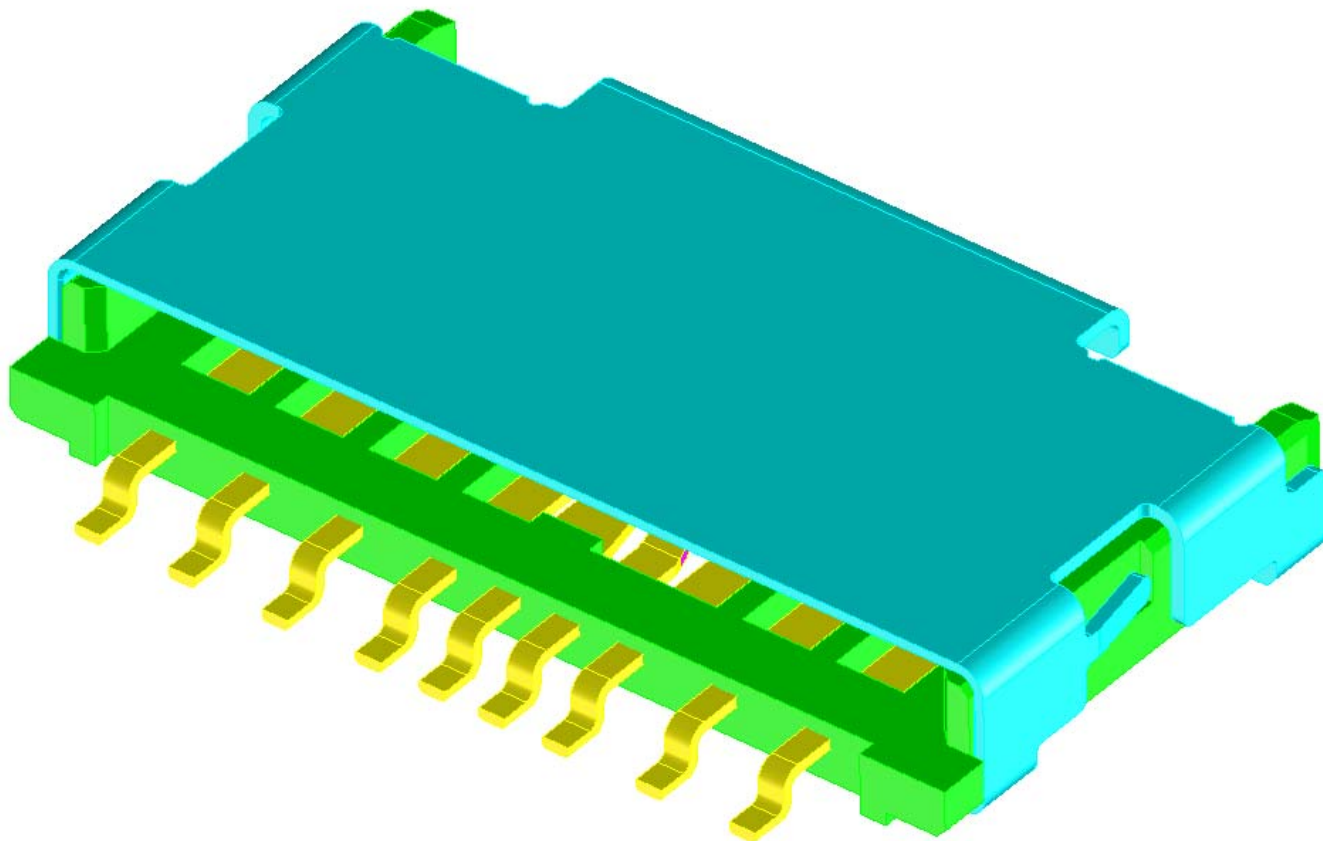




PRODUCT SPECIFICATION



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REVISION:	ECR/ECN INFORMATION:		PRODUCT NO	SDM06	SHEET No
A	EC No:	2010/04/08	PRODUCT NAME	Micro SD(T-Flash) card socket	1 of 6
DOCUMENT NUMBER:		CREATED / REVISED BY:		CHECKED BY:	APPROVED BY:
PS-SDM-0002		ANNE.YANG		KENNY.CHEN	DEVIN.CHEN



PRODUCT SPECIFICATION

1.0 SCOPE

This Product Specification covers the performance requirements for Micro SD card socket connector series.

2.0 PRODUCT DESCRIPTION

2.1 PRODUCT NAME AND SERIES NUMBER(S)

Micro SD card socket connector **SDM06 Series**

2.2 DIMENSIONS, MATERIALS, PLATINGS AND MARKINGS

See appropriate sales drawings for details on dimensions, materials, plating and markings.

2.3 SAFETY AGENCY APPROVALS

See appropriate sales drawings

3.0 APPLICABLE DOCUMENTS AND SPECIFICATIONS

Please refer to the Sales Drawings, and other sections of this Specification for specific references to applicable documents and specifications. In cases where the Product Specification differs from the Sales Drawings, the Sales Drawing will take precedence

EIA-364 TEST METHODS FOR ELECTRICAL CONNECTORS

4.0 RATINGS

4.1 VOLTAGE

5 Volts DC

4.2 CURRENT

0.5 A Max.

4.3 TEMPERATURE

Operating Temperature Range: - 40°C to + 85°C

Storage Temperature Range: - 40°C to + 100°C

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5.0 PERFORMANCE

Electrical Requirements

1	Contact Resistance (LLCR)	100 milliohms Max	Subject mated contacts assembled in housing to 20mV maximum open circuit at 10mA maximum. Per EIA 364-23
2	Insulation Resistance	100 Mega Ohm Min.	After 500 VDC for 1 minute, measure the insulation resistance between the adjacent contacts of mated and unmated connector assemblies. Per EIA 364-21
3	Dielectric Withstanding Voltage	No voltage breakdown.	Apply a voltage 500 V AC(RMS) for 1 minute, 50Hz. Voltage application as above indicate. between adjacent terminals and between terminals to ground. Per EIA 364-20
4	Current Rating	Temperature rise: 30°C Max.	Apply the rated current to connector, Per EIA 364-70

Mechanical Requirements

5	Durability	ΔR : 20 milliohms Max (change from initial)	Operation Speed 400~600 cycles/hr. Durability Cycles: 10000 Cycles Per EIA 364-09
6	Vibration	ΔR : 30 milliohms Max (change from initial) & No electrical discontinuity greater than 1msec.	Subject mated connectors to 10-50-10 Hz traversed in 1 minutes at 1.52mm P-P or 1.96m/ s ² {2G} amplitude for 2 Hour each of 3 mutually perpendicular planes. Per EIA 364-28
7	Mechanical Shock	ΔR : 30 milliohms Max (change from initial) & No electrical discontinuity greater than 1msec.	Accelerate Velocity: 490m/ s ² (50G) Waveform: 11ms Half-sine shock Velocity Change: 3.4m/s No. of Drops: 3 drops each to normal and reversed directions of X, Y and Z axes, totally 18 drops, passing 1mA current during the test. Per EIA 364-27
8	Terminal Retention force	2N Min.	Pull out the terminal in um-mating direction.
9	Card Insertion force	30N Max.	After reflow, insert the card in mating direction.

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10	Card withdrawal force	0.5N Min, 30N Max.	Pulling out the terminal in um-mating direction.
11	Contact normal force per contact	0.2N Min.	Press the contact to the Housing 0.1mm.
12	Card reverse insert	No damage	Insert Micro SD card inversely into the connector and push with a force of 19.6N
13	Peeling force(Shell)	30N Min.	Test peeling force in the three direction Including front /back/side direction. See Fig.2

Environment Requirements

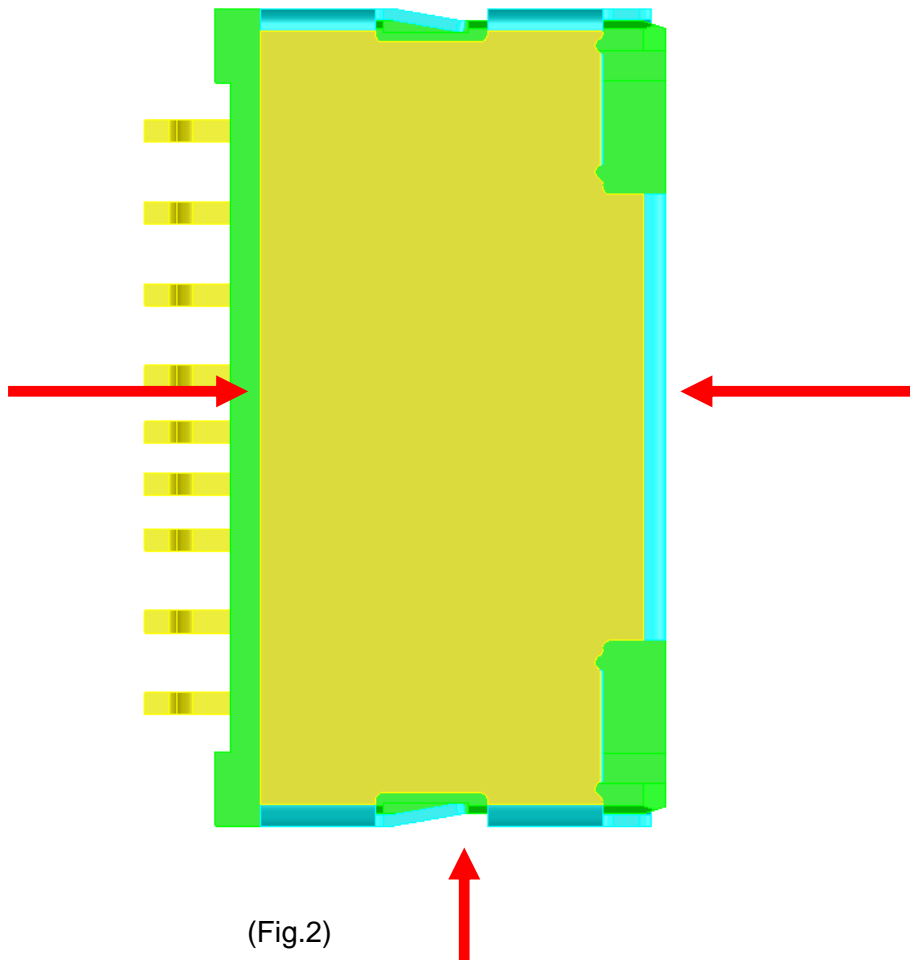
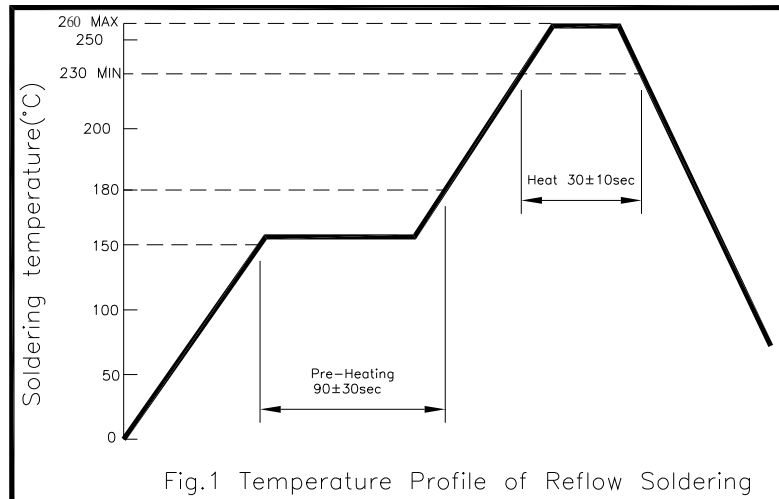
14	Thermal Shock	ΔR : 30 milliohms Max. (change from initial) & Appearance: no damage	The card shell be mated and exposed to the following condition for 25 cycles, and one duration is $-40 \pm 3^{\circ}\text{C} / (0.5\text{h}) \sim 85 \pm 2^{\circ}\text{C} / (0.5\text{h})$. Transit time shall be within 3 minutes, Recovery time 1~2 hours Per EIA-364-32
15	Static Humidity	ΔR : 30 milliohms Max. (change from initial) & Appearance: no damage	Test mated connector in chamber and expose to a temperature of $60 \pm 2^{\circ}\text{C}$ with a relative humidity of 90~95%RH for 96 h. Note: Remove surface moisture and air dry for 1~2 hour prior to measurements. Per EIA 364-31
16	Solder ability	Solder coverage: 95% MINIMUM	Dip solder tails into the molten solder (held at $250 \pm 5^{\circ}\text{C}$) for 3 ± 0.5 sec. Per EIA 364-52
17	Solder Heat Resistance	Visual: No damage After 2 times of reflow	Place connector o applicable P.C.B footprint and float on solder bath at $250 \pm 5^{\circ}\text{C}$ for 10 ± 2 seconds. Per EIA 364-56; Refer to Fig.1
18	Salt Spray	ΔR : 30 milliohms Max. (change from initial) & Appearance: no damage	Duration: 48 hours exposure; Atmosphere:salt spray from a $5\% \pm 1^{\circ}\text{C}$ solution. Temperature: $35 \pm 2^{\circ}\text{C}$ Per EIA 364-26 condition A
19	Heat Temperature Life	ΔR : 30 milliohms Max. (change from initial) & Appearance: no damage	The card shell be mated and exposed to the condition of $85^{\circ} \pm 2^{\circ}\text{C}$ for 96 hours. Less than 25% relative humidity. Recovery time 1~2 Hours. Per EIA 364-17
20	Cold Temperature Life	ΔR : 30 milliohms Max. (change from initial) & Appearance: no damage	The card shell be mated and exposed to the condition of $-40^{\circ} \pm 3^{\circ}\text{C}$ for 96 hours. Recovery time 1~2 Hours. Per EIA 364-17

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6.0 PACKAGING

Parts shall be packaged to protect against damage during handling, transit and storage. See packaging appropriate drawings

7.0 RECOMMENDED REFLOW PROFILE



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PRODUCT SPECIFICATION

8.0 TEST GROUPINGS

Group Number	1	2	3	4	5	6	7	8	9	10	11
Contact Resistance	2,8	2,7		2,4	2,9						
Insulation Resistance		3	3								
Dielectric withstanding voltage		4	2								
Temperature Rise								1			
Durability	5									3	
Vibration		6									
Mechanical Shock		5									
Terminal retention force									1		
Card insertion force	3,6	8			3,7						
Card withdrawal force	4,7	9			4,8						
Contact normal force										2,4	
Card reverse insert						2					
Peeling force							2				
Static humidity			5								
Cold temperature life					5						
Heat temperature life					6						
Thermal shock			4								
Salt spray				3							
Solder ability											1
Solder heat Resistance	1	1	1	1	1	1	1			1	

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