

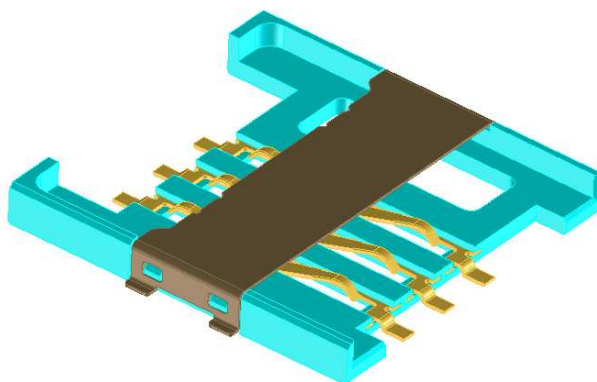


PRODUCT SPECIFICATION

SIM CARD CONNECTOR, 1.9 MM HEIGHT

INDEX

- 1.0 SCOPE
- 2.0 PRODUCT DESCRIPTION
- 3.0 APPLICABLE DOCUMENTS AND SPECIFICATIONS
- 4.0 RATINGS
- 5.0 ELECTRICAL PERFORMANCE
- 6.0 ENVIRONMENTAL PERFORMANCE
- 7.0 MECHANICAL PERFORMANCE
- 8.0 PACKAGING
- 9.0 TEST GROUPING



REVISION: D	ECR/ECN INFORMATION: EC NO: SH2008-0563 DATE: 2008/05/08	TITLE: SIM CARD CONNECTOR			SHEET NO. 1 OF 6
DOCUMENT NUMBER: PS-47548-001		WRITTEN BY: YWANG	CHECKED BY: YLZHU	APPROVED BY: HWWANG	FILE NAME
<small>TEMPLATE FILENAME: PRODUCT_SPEC[SIZE_A4](V.1).DOC</small>					



PRODUCT SPECIFICATION

1.0 SCOPE

This specification covers the SIM Card Connector 475480001.

2.0 PRODUCT DESCRIPTION

2.1 PRODUCT NAME AND NUMBER

<u>Product name</u>	<u>Product number</u>
SIM Card Connector, 1.9mm height	475480001

2.2 DIMENSIONS, MATERIALS, PLATINGS AND MARKINGS

See the appropriate Sales Drawing (SD-47548-001) for information on dimensions, materials, plating and markings.

2.3 This connector assembly consists of a plastic housing, 6 contacts and 1 securing nails. Solder components shall meet Lead-free soldering requirements.

3.0 APPLICABLE DOCUMENTS AND SPECIFICATIONS

Please refer to the Sales Drawings **SD-47548-001**, 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.

4.0 RATINGS

- 4.1 Voltage: $V_{cc}=5v\pm 10\%$, ripple $\leq 100mV_{pp}$
- 4.2 Current: 0.5A max
- 4.3 Operating Temperature : -40°C to +85°C
- 4.4 Storage temperature: -40°C to +100°C
- 4.5 Humidity Range: 10% to 80% RH
- 4.6 Durability: 5,000 Cycles

REVISION: D	ECR/ECN INFORMATION: EC NO: SH2008-0563 DATE: 2008/05/08	TITLE: SIM CARD CONNECTOR			SHEET NO. 2 OF 6
DOCUMENT NUMBER: PS-47548-001		WRITTEN BY: YWANG	CHECKED BY: YLZHU	APPROVED BY: HWWANG	FILE NAME
<small>TEMPLATE FILENAME: PRODUCT_SPEC[SIZE_A4](V.1).DOC</small>					



PRODUCT SPECIFICATION

5 ELECTRICAL PERFORMANCE

TEST REF.	ITEM	TEST CONDITION	REQUIREMENT
5.1	Contact resistance	Mate connector with dry circuit of 20mV and a current of 100mA. Per EIA-364-23	100mΩ max.
5.2	Insulation resistance	Measurement shall be performed after 60 second from voltage application 500VDC between the contact Per EIA-364-21	100MΩ min.
5.3	Dielectric withstanding voltage	Apply 500V AC for 1 minute between adjacent terminals or terminal and ground. Per EIA-364-20	No voltage breakdown
5.4	Temperature Rise	Mate card and measure the temperature rise of contact, when rated current is passed. Per EIA-364-70	30°C Max.

6 ENVIRONMENTAL PERFORMANCE

TEST REF.	ITEM	TEST CONDITION	REQUIREMENTS
6.1	High Relative Humidity Exposure	The card shall be mated and exposed to the condition of +50±2°C @ 90%~95% RH for 96 hours. Recovery time 1~2 hours Per EIA-364-31	Appearance: no damage Contact Resistance: 100 mΩ maximum
6.2	Low Temperature Exposure	The card shall be mated and exposed to the condition of -40±3°C for 96 hours. Recovery time 1~2 hours	Appearance: no damage Contact resistance: 100 mΩ maximum
6.3	High Temperature Exposure	The card shall be mated and exposed to the condition of +85±2°C for 96 hours, less than 25% relative humidity. Recovery time 1~2 hours	Appearance: no damage Contact resistance: 100 mΩ maximum
6.4	Thermal Shock	The card shall be mated and exposed to the following condition for 25 cycles. 1 cycle: a) -40±3°C for 30 minutes b) +85±2°C for 30 minutes Transit time shall be within 3 minutes, Recovery time 1~2 hours Per EIA-364-32	Appearance: no damage Contact resistance: 100 mΩ maximum

REVISION: D	ECR/ECN INFORMATION: EC NO: SH2008-0563 DATE: 2008/05/08	TITLE: SIM CARD CONNECTOR			SHEET NO. 3 OF 6
DOCUMENT NUMBER: PS-47548-001		WRITTEN BY: YWANG	CHECKED BY: YLZHU	APPROVED BY: HWWANG	FILE NAME



PRODUCT SPECIFICATION

6.5	Salt Spray Test	The card shall be mated and exposed to the following salt mist conditions. At the completion of the exposure period, salt deposits shall be removed by a gentle wash or dip in running water, after which the specified measurements shall be performed. NaCl solution: Concentration : $5\pm 1\%$ Spray time : 48 hours Temperature : $35\pm 2^{\circ}\text{C}$ Per EIA-364-26 condition A	Appearance: no damage Contact resistance: 100 m Ω maximum
6.6	Solder-ability	Dip solder tails into the molten solder (held at $250\pm 5^{\circ}\text{C}$) up to 0.5mm from the tip of tails for 3 ± 0.5 seconds.	Contact solder Pad shall have a Min. 95% solder coverage
6.7	Resistance to Soldering reflow Heat	Twice through IR Profile* Pls. see Appendix 1	No damage After 2 times of reflow

REVISION: D	ECR/ECN INFORMATION: EC NO: SH2008-0563 DATE: 2008/05/08	TITLE: SIM CARD CONNECTOR			SHEET NO. 4 OF 6
DOCUMENT NUMBER: PS-47548-001		WRITTEN BY: YWANG	CHECKED BY: YLZHU	APPROVED BY: HWWANG	FILE NAME



PRODUCT SPECIFICATION

8.0 PACKAGING

See packaging specification and pack assembly drawing. Parts shall be packaged to protect against damage during handing, transit and storage.

9.0 Test Sequences for MS Duo: (Sample Group Size: 5pcs)

GROUP NUMBER	1	2	3	4	5	6	7	8
Contact resistance	1,4	4,9	1,6	1,3	4,10			
Insulation resistance			2,7					
Dielectric withstanding voltage			3,8					
Temperature Rise						2		
High Relative Humidity Exposure			5					
Low Temperature Exposure					5			
High Temperature Exposure					6			
Thermal Shock			4					
Salt Spray Test				2				
Solder-ability							1	
Resistance to Soldering reflow Heat						1		
Normal force		3,8			3,9			
Durability		5						
Card insertion force		1,6			1,7			
Card withdraw force		2,7			2,8			
Terminal Retention Force (in Housing)								1
Mechanical Shock	2							
Vibration	3							

Appendix 1: *IR REFLOW REQUIREMENTS:

Condition

> 100 °C
 > 150 °C
 > 217 °C
 within 5 °C of Peak
 Peak Temperature
 Average ramp-up rate (25°C to 217°C)
 Cool-down rate (Peak to 50°C)
 Time from 30°C to 255°C

Exposure

between 360~ 600 seconds
 at least 240 seconds
 at least 90 seconds
 20 ~40 second
 Greater than or equal to 255°C
 Less than 3°C /second
 Less than 6°C /second
 No greater than 360 seconds

REVISION: D	ECR/ECN INFORMATION: EC NO: SH2008-0563 DATE: 2008/05/08	TITLE: SIM CARD CONNECTOR			SHEET NO. 6 OF 6
DOCUMENT NUMBER: PS-47548-001	WRITTEN BY: YWANG	CHECKED BY: YLZHU	APPROVED BY: HWWANG	FILE NAME	