PRODUCT SPECIFICATION

SIM CARD CONNECTOR, 2 MM HEIGHT

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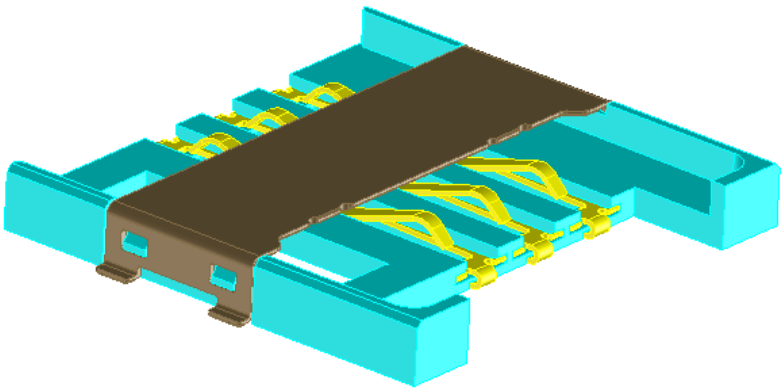
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PS-47308-001	CYZHU			

1.0 SCOPE

This specification covers the SIM Card Connector 473080001.

2.0 PRODUCT DESCRIPTION

2.1 PRODUCT NAME AND NUMBER

Product name	*Product number*
SIM Card Connector, 2mm height	473080001

2.2 DIMENSIONS, MATERIALS, PLATINGS AND MARKINGS

See the appropriate Sales Drawing (SD-47308-001) 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-47308- 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 : Vcc=5v±10%,ripple<=100mVpp

4.2 Current : 10mA max

4.3 Operating Temperature : -40℃ to +85℃

4.4 Storage temperature: -40℃ to +100℃

4.5 Humidity Range : 10% to 80% RH

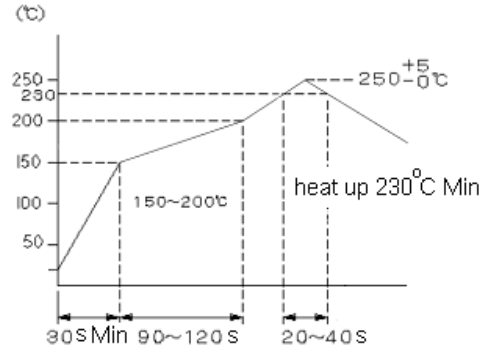
4.6 Durability: 5,000 Cycles

5 ELECTRICAL PERFORMANCE

TEST REF.	ITEM	TEST CONDITION	REQUIREMENT
5.1	Contact resistance	Mate connector with dry circuit of 20mV and a current of 10mA. 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 530V 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 method 1	30ºC 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 +60±2℃ @ 90~95% Humidity 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℃ 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℃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℃ for 30 minutes b) +85±2℃ 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
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±1% Spray time ： 48 hours Temperature ： 35±2℃ Per EIA-364-26 condition A	Appearance: no damage Contact resistance: 100 mΩ maximum
6.6	Solderability	Dip solder tails into the molten solder (held at 250±5℃) 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	Infrared reflow condition  TEMPERATURE CONDITION GRAPH (TEMPERATURE ON BOARD PATTERN SIDE)	No damage After 2 times of reflow

7 MECHANICAL PERFORMANCE

TEST REF.	ITEM	TEST CONDITION	REQUIREMENTS
7.1	Normal force	1.Measure contact normal force: terminal contact point (0.01mm from housing surface)	0.5N Min
7.2	Durability	Insertion and withdrawal are repeated 5000 cycles with card at the speed rate of 400~600 cycles/hour. Per EIA-364-09B	Appearance: no damage Contact Resistance: 100 mΩ Maximum
7.3	Card insertion force	After reflow, insert the card in mating direction.	5N Max
7.4	Card withdraw force	After reflow, insert the card in un-mating direction.	1N min
7.5	Mechanical Shock	Mate card and subjected to the following shock conditions. 3 mutually perpendicular axis, passing DC 1mA current during the test. (Total of 18 shocks) Test pulse : Half Sine Peak value : 490m/s2 {50G} Duration : 11ms Per EIA-364-27B	Appearance: no damage <1ms discontinuity 100 mΩ Maximum
7.6	Vibration	Mate card and subjected to the following vibration conditions, for a period of 2 hours in each of 3 mutually perpendicular axes, with passing DC 1Ma during the test. Amplitude : 1.52mm P-P or 19.6m/s2{2G} Frequency : 10-55-10Hz shall be traversed in 1 minute. Per EIA-364-28C	Appearance: no damage <1 ms discontinuity 100 mΩ Maximum

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
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**			
Solderability						**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**		
Mechanical Shock	**2**						
Vibration	**3**						