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### 1.SCOPE

This specification covers performance , tests and quality requirements for SIM CARD(PUSH/PUSH) CONNECTORS.

### 2.MATERIAL AND FINISH

Insulator: LCP, COLOR: BLACK, rated UL94V-0

Contact: (A) Material Phosphor Bronze, T=0.15mm (B) Finish: Selective Gold Plated on

Contact Area, Plated Tin 120u" on Solder Area Shell: (A) Material:SUS304-1/2H.T=0.15mm

(B) Finish: 50u" NICKEL Plated on allover, gold flash on solder ground.

#### 3.RATINGS

Voltage Rating: 250V AC Current Rating: 0.5Amps Max

Contact Resistance (signal) :  $100m\Omega$  Initial ( $140m\Omega$  After Test) Max.

Insulation Resistance :  $500 \text{m}\,\Omega$  Min. at 500 VDC. Dielectric Withstanding Voltage : 250 VAC/Minute.

Operating Temperature : -55°C~+85°C

Mating Cycle: 5000 Insertions

### 4.PERFORMANCE

### 4.1ELECTRICAL REQUIREMENTS

ITEM	DESCRIPTION	TEST CONDITION	REQUIREMENT	
	Low Level	Mate dummy card, measure by dry cicuit,	100 mΩ Max. Initial	
1	Contact	20mV max,10Ma max. (EIA 364-23)	100+/-40mΩMax.Final	
	tance			
	Insulation	Apply a 500V DC between adjacent	500MΩ Min	
2	Resistance	Terminals and between terminals to ground		
	Resistance	(EIA364-21)		
	Dielectric 3 Withstanding	Apply a voltage 500V AC for 1 minute between		
3		adjacents		
3	Voltage	Terminals and between terminals to ground		
	Voltage	(EIA364-20)		
		{OPEN MODE}		
	Card Detect	Mate dummy card ,measure of contact resistance	$500M\Omega$ Min	
4		{CLOSE MODE}		
		Unmate dummy card, measure of contact resistance	50 mΩ Max	

### 4.2 MECHANICAL REQUIREMENTS

ITEM	DESCRIPTION	TEST CONDITION	REQUIREMENT
1	Isertion and	Insert and withdraw memory	Push force: 1kgf Max
	Withdrawal	card at a rate of 25±3 mm per	Pull force: 0.1kgf Min



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	force	minute. (EIA 364-13)					
2	Durability	Insertion and extraction are repeated 5000 cycles with the actually card at the speed rate of 400~600 cycles/hour.  Exchange the actually card every 2000 cycles  (EIA364-09)	Appearance:No damage contact Resistance: $100m\Omega$ Max.Measuring by dummy card				
3	Normal force	Push the contact point.  Measure the normal force at the deformend direction	25g/PIN Min		Resistance: $100 \text{m} \Omega$ Max. Measuring by dummy card		
4	Vibration	Mate dummy card and subject to the following vibration conditions, for aperiod of 2 hours in each of 3 mutually perpendicular axis, passing DC 1mA during the test.  Amplitude:1.5mm P-P or 49m/s2  Frequency:10-55-10 Hz  Shall be traversed in 20 minute. (EIA 364-28 Condition 1)	Conta	ct resistanc	e:100mΩ	ax	
5	Shork (Mechanical)	Mate a dummy card and subject to the follwing shork conditions. 3 shorks shall be applied along 3 mutually perpendicular axis passing DC 1Ma current during the test.(EIA-364-27B)	Conta	arance:No d ct resistanc ntinuity:0.1	_	X	

### 4.3 ENVIRONMENTAL REQUIREMENTS

ITEM	DESCRIPTION	TEST CONDITION	REQUIREMENT	
		Mate a DUMMY CARD AND	No appearance damaged	
	Humidity (steady state)	EXPOSE TO 60±2°C for 96 ho		contact resistance: 100 m $\Omega$
		Relative humidity 90.Upon completion	Max.	
		of the exposure period, the test	Meet Dielectric strength	
		specimens shall be conditioned at	Test. Insulation resistance:100	
		anibient room conditions for 1 to 2	$M\Omega$ Min	



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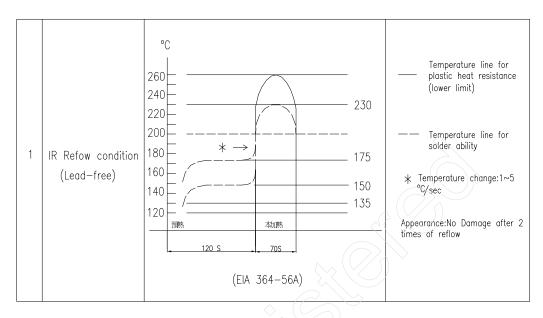
		measurements shall be performed	
		(EIA-364-31A)  Mate,un-unmate dummy card 200	No appearance damaged
2	Temperature cycling	cycles. Then. a)-55±3°C for 30 minute b)85±2°C for 30 minuter Repeat a) b) 1cycles Then put in ambient room 1~2hour. Transit time in 3 minute(EIA 364-32)	contact resistance: $100 \text{ m}\Omega$ Max.
3	Heat Resistance	Mate a dummy card and expose to 70±2°C for 48Hr Upon completion of the exposure period, the test specimens shall be conditioned at ambient room conditions for 1 to 2Hr, after which the specified measurements shall be performed.  (MIL-STD-202 Method 108)	No appearance damaged contact resistance: $100 \text{ m}\Omega$ Max.
4	Cold Resistance	Mate a dummy card and expose to -52°C for 96Hr  Upon completion of the exposure period, the test specimens shall be conditioned at ambient room conditions for 1 to 2Hr, after which the specified measurements shall be performed.  (mil-std-202)	No appearance damaged contact resistance: $100 \text{ m}\Omega$ Max.
5	Salt spray	Mate dummy card and exposed to the follwing salt mist conditions.  Upon 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  Ambient temperature 35±2°C  Concentration 5%  Spray time: 8Hrs  Gentle wash after test (EIA-364-26)	No appearance damaged contact resistance: $100 \text{ m}\Omega$ Max.
6	Resistance to	Touch the terminal with the soldering	No appearance damaged



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		form the tip	of tail for 3±0.5sec	
7	Solder ability	245±5°C	(EIA-364-52)	Solder coverge: 95%Min

### 4.4 INFRARED REFLOW CONDITIONS



### 5.TEST SEQUENCE DIAGRAM

Test Description			Tes	st Group			
	1	2	3	4	5	6	7
Examination product	1,6	1,7	1,5	1,5	1,5	1,5	1,3
Low Level Contact Resistance	2, 5		2,4	2,4	2,4	2,4	
Insulation Resistance		2,5					
Withstanding Voltage		6					
Durability	3						
Vibration						3	
Shock	4						
Humidity Resistance		4					
Temperature cycling		3					
Heat Resistance					3		
Salt Spray			3				
Cold Resistance				3			
Isertion and Withdrawal force							2
Test Description			Su	pplemental to	est	•	•
Terminal Normal force		5PCS,					
Resistance to solder heat		5PCS					
Solderability		5 PCS					