

ENGINEERING DEPT	PRODUCT SPECIFICATION	SPEC No: GS-BF-EN-080
	FOR Micro SIM +Nano SIM/Micro SD (T/F)Card Connector SERIES	Page 1 of 5

### 1.0 SCOPE

This Specification covers Micro SIM +Nano SIM/Micro SD Card Connector SERIES

### 2.0 APPLICABLE DOCUMENTS AND SPECIFICATIONS

See sales drawings and other sections of this specification for the relevant reference documents. In cases where the specification differs from the drawings, the drawings take precedence.

### 3.0 DESIGN AND CONSTRUCTION

Product Shape, dimensions and material Refer to the drawing

### 4.0 RATING

current Rating: 1A AC/DC

voltage Rating: 30 V AC/DC

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

Storage Temperature Range: -40 °C to +70°C

### 5.0 TEST AND PERFORMANCE:

Unless otherwise specified, all tests and measurement shall be performed under the following conditions in accordance with EIA

Ambient Temperature: **15 °C-35 °C**

Relative Humidity : **63 %-67 %**R.H.

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## 6. ELECTRICAL REQUIREMENTS

ITEM	DESCRIPTION	TEST CONDITIN	REQUIREMENT
6.1	Contact Resistance	Mate connectors with dry circuit(20mV,100mA Max) Spec: EIA-364-23C	Less than 50mΩ
6.2	Insulation Resistance	When applied DC 500V between adjacent terminal or ground Spec: EIA-364-21C	More than 1000MΩ
6.3	Dielectric strength	When applied AC 500V 1 minute between adjacent terminal Spec: EIA-364-20C	No change
6.4	Temperature Rise	Mated connectors :measure the temperature rise at the rated current 0.5A Spec: EIA 364-70B	Temperature rise: 30°C Max (only for T Flash)

## 7.MECHANICAL REQUIREMENT

ITEM	DESCRIPTION	TEST CONDITIN	REQUIREMENT
7.1	Durability	Operation Speed: 200 cycles/H. Durability Cycles: 3000 Cycle SPEC: EIA-364-9C	No mechanical damage Contact Resistance 100mΩMax
7.2	Terminal Retention Force	Axial pullout force on the terminal in the housing at a rate of 25±3mm/Min per minute Spec: EIA-364-13B	3N Min
7.3	Mating and Unmating force	Push the actually card with evaluation Tray at the speed rate of 25±3 mm / minute. Push the ejecting bar when the tray is ejected from the connector Spec: EIA-364-13B	Mating force: 10N Max Unmating force: 2N Min ; 10N Max
7.4	Vibration	Solder connectors on PCB, subject to the following vibration conditions, for a period of 2 hours in each of 3 mutually perpendicular axes, passing 0.1V, DC, 1mA Current during test. Amplitude: 1.52 mm P-P Sweep Frequency. : 10 – 55 – 10 Hz /min (Shall be traversed in 1 minutes) Spec : EIA-364-28D	No evidence of physical damage current discontinuity ≤ 10 μ s

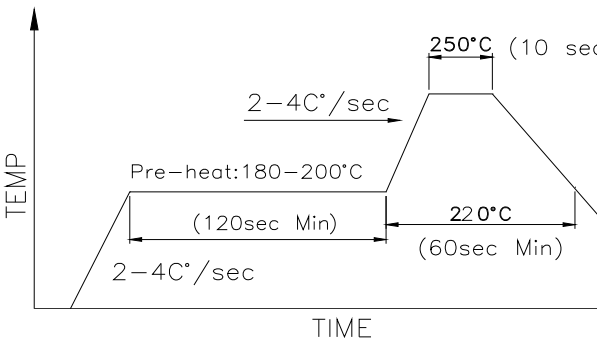
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7.5	Physical Shock	Solder connectors on PCB, subject to the following shock conditions, 3 shocks shall be period along 3 mutually perpendicular axis, passing DC 100mA current during the test. (Total of 18 shocks) Test Pulse: Half sinusoidal-Peak 490 m/s <sup>2</sup> (50G) Duration: 11m sec. Spec: EIA-364-27B	No evidence of physical damage current discontinuity $\leq 10 \mu s$
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## 8. ENVIRONMENTAL REQUIREMENTS

ITEM	DESCRIPTION	TEST CONDITIN	REQUIREMENT										
8.1	Cold Resistance	Solder connectors on PCB, expose to $-40\pm 3^{\circ}\text{C}$ for 48 hours. Upon completion of the exposure period, the test specimens shall be conditioned at ambient room conditions for 1 of 2 hours, after which the specified measurements shall be performed.	No mechanical damage Contact Resistance 100m $\Omega$ Max Insulation Resistance: 1000M $\Omega$ Min										
8.2	Thermal Shock	Samples shall be placed in the test chamber with the test condition for 5 cycles <table border="1"> <tr> <td>Temperature(<math>^{\circ}\text{C}</math>)</td> <td>-55</td> <td>+25</td> <td>+85</td> <td>+25</td> </tr> <tr> <td>Time(minute)</td> <td>30</td> <td>5</td> <td>30</td> <td>5</td> </tr> </table> Spec:EIA 364-32A	Temperature( $^{\circ}\text{C}$ )	-55	+25	+85	+25	Time(minute)	30	5	30	5	No evidence of physical damage Contact Resistance 100m $\Omega$ Max Insulation Resistance 1000M $\Omega$ Min Dielectric strength: 500V DC
Temperature( $^{\circ}\text{C}$ )	-55	+25	+85	+25									
Time(minute)	30	5	30	5									
8.3	Humidity Life	The connectors shall be mated and exposed to the condition of $40\pm 2^{\circ}\text{C}$ with 90~95% Humidity for 96 hour; Recovery time 1~2 hours Spec: EIA-364-31B	No evidence of physical damage Contact Resistance 100m $\Omega$ Max Insulation Resistance 1000M $\Omega$ Min Dielectric strength: 500V DC										

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8.4	Temperature Life(Heat Aging)	Mated Connector $85\pm 2^{\circ}\text{C}$ , 96 hours Upon completion of the exposure period, the test specimens shall be conditioned at ambient room conditions for 1 of 2 hours, Spec: EIA-364-17B.	No mechanical damage Contact resistance 100 m $\Omega$ max. Insulation Resistance 1000M $\Omega$ Min
8.5	Solder ability	The surfaces to be tested shall be immersed in flux for a minimum of $5\pm 0.5$ seconds; the temperature of the solder bath shall be maintained as measured below the surface on the solder at $245^{\circ}\text{C}\pm 5^{\circ}\text{C}$ Spec: EIA 364-52	No mechanical damage coverage: 95%
8.6	Salt Spray	Subject mated connectors to $35\pm 2^{\circ}\text{C}$ and $5\pm 1\%$ salt condition for 48hours. After test, rinse the sample with water and recondition the room temperature for 2 hour Spec: EIA-364-26B	No detrimental corrosion allowed in contact area. contact resistance $\cong 100\text{ m}\Omega$
8.7	Resistance to soldering heat	 <p>test condition for reflow soldering Spec: MIL-STD-202 F, Method 210 A</p>	No evidence of physical damage ;

