

PRODUCT SPECIFICATION

Part Number	U-E-M5SS-W-0			Rev	E		Date	10/12/14
Product Description	Micro USB Receptacle, Type B, Top-Mount,IP67						Page	1
Doc Number	U-E-M5SS-W-0	Prepared	AO	Checked	ST	Approved	VJ	

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1. SCOPE.
This product specification defines the mechanical,electrical and environmental performance repuirements and test methods for Micro-USB connector series products.

2. APPLICABLE DOCUMENT.
In the event of conflict between the repuirements of this specification and the sales drawing,the sales drawing shall take precedence.In the event of conflict between the repuirents of the specification and the referenced documents, this specification shall take precedence.
EIA-STANDARD-364:ELECTRICAL CONNECTOR/SOCKET TEST PROCEDURES
INCLUDING ENVIRONMENTAL CLASSIFICATIONS

3. RATINGS.
3.1:Operating temperature: -30℃~+85℃
Operating Humidity Range: 20%~85%
3.2:Current Rating: 1.8A(PIN1/5) ; 0.5A(PIN2/3/4)
3.3:Voltage Rating: 30VAC
3.4: Storage Temperature Range: -40℃ to 85℃
Storage Humidity Range: 30%~70%

ISSUE	DATE	WRTN	CHKD	APVD	DESCRIPTIONS
001		PENG			First issued

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4. Electrical characteristics			
	Item	Condition	Specifications
1	Low Level Contact Resistance	Mated plugs, measure by dry circuit,20mV DC maximum,open circuit 100Ma maximum.Except wire conductor resistance. EIA 364-23B	30mΩ Max
2	Dielectric withstanding Voltage	Mated plugs,apply 300V AC(rms) at 60Hz for 1 minute between adjacent terminal or ground. EIA-364-20	No Breakdown
3	Insulation Resistance	Mated plugs,apply 500V DC for 1 minute between adjacent terminal or ground. EIA-364-21	500 MΩ Min
6. Mechanical characteristics			
	Item	Condition	Specifications
1	Solderability	Solderability temperature: 245℃±5℃. Immersion duration: 3 seconds.	Wet solder coverage: 95%Min
2	Vibration	Mate plugs and subject to the following vibration conditions:Random Vibration 3 mutually perpendiculatly.10~2000Hz,0.02G2/Hz 20 minutes per plane EIA-364-28	Appearance:No Damage Contact Resistance:30 mΩ Max
3	Mechanical shock	Mate plugs and subject to the following shock conditions,3shocks shall be applied along 3 mutually perpendicular axes, passing DC 100MA current during the test.(Total of 18 shocks) Test Pulse:Half Sine Peak Value:30G Duration:11ms EIA-364-27	Appearance:No Damage Contact Resistance:30mΩ Max
4	Durability	Mated/un-mated up to 10,000 cycles repeatedly at maximum rate of 500 cycles per hour.(When manually operated, mating speed should be below 200 cycles per hour.) EIA-364-09	Appearance:No Damage Contact Resistance:30mΩ Max

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5	Mating and Unmating Force	Mating/un-mating at a rate of 12.5mm per minute. EIA-364-13	Mating Force: 35N(3.6kgf) Max. Unmating Force: 8N(0.8kgf) Min 25N(2.58kgf)Max
6	Thermal shock	Mate plugs and subject to the flowing conditions for 10 cycles, Upon completion of the exposure period, the test specimens shall be conditions for 1 to 2 hours, after which the specified meaasurements shall be performed. 1 cycle a) $-55\pm 3^{\circ}\text{C}$ 30minutes b) $+85\pm 2^{\circ}\text{C}$ 30minutes EIA-364-32C	Appearance:No Damage Contact Resistance:30mΩ Max
7	Reflow Heat Resistance Test	<p>pre-heat:150°C~180°C(90~120 seconds) Peak temperature:245°C ± 5°C(10 sec within) 220°C above,30~60sec within</p> <p>The graph shows a temperature profile for reflow soldering. The y-axis is temperature in °C (150, 180, 220, 250) and the x-axis is time in seconds. The profile starts with a pre-heating phase at 150~180°C for 90~120 seconds. This is followed by a reflow phase where the temperature rises to a peak of 245°C ± 5°C within 10 seconds. The reflow temperature rise speed is specified as 3°C/sec below. After the peak, the temperature is maintained at 220°C or more for 30~60 seconds. The cooling phase is labeled 'Colding speed:Natural ecolding'.</p>	Electrical characteristics shall be satisfied. No any damage after reflow.

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8	Cyclic Humidity	Mated connectors and expose to humidity in 7 cycles 7 clause. Upon completion of the exposure period, the test specimens shall be conditioned at ambient room conditions for 1 to 2 hours, after which the specified measurements shall the performed. EIA-364-31	Appearance:There shall be no remarkable corrosion Contact Resistance:30mΩ Max
9	Temperature Life	Subject mated samples to temperature life at 85°C for 96 hours. EIA 364-17B	Appearance:No Damage Contact Resistance:30mΩ Max
10	Water Proofness	This product is based on IPX7(1m,30min)	Appearance:Without leaking

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<div>7. Amendment.</div> <div>When the amendment of this specification comes into necessity, it shall be made by the mutual consultation and agreement between manufacturer and customer</div>		