1. Scope

This specification covers the performance, tests and quality requirements for the SFP28 Stacked Connector and Cage Assemblies.

Applicable Product Models:FSFPC001series.

2. Applicable documents

The following documents form a part of this specification to the extent specified herein. Unless otherwise specified, the latest edition of the document applies. In the event of conflict between the requirements of this specification and the product drawing, the product drawing shall take precedence. In the event of conflict between the requirements of this specification and the referenced documents, this specification shall take precedence.

3. Ordering information

Refer to the drawing.

4. Connector dimensions

Refer to the drawing.

5. Material

Housing： Thermoplastic (UL94V-0)

Terminal: Copper Alloy

Plating: Selective gold plated on contact area and matte tin plated on tails area

6. Accommodated P.C.B layout

Refer to the drawing.

7. Rating

Operating voltage(Max.):30V DC

Current rating(Max.) :0.5A mps Max

Temperature range-operating: -40°C -- +85°C

8. Performance

Serial Number	Test item	Procedure	Requirement
1	Examination Of Product	Visual inspection.	Meets requirements of product Drawing. No physical damage.

ELECTRICAL REQUIREMENT

2	Contact Resistance	Mate The sample connectors, measure by dry circuit, 20mV Max., 100mA Max. (EIA-364-23)	Inital value:80mΩ MAX. After environmental tests:90mΩ MAX
3	Insulation Resistance	Apply DC 300V Voltage for 2 minutes and then test between adjacent contacts of mated specimens. (EIA-364-21)	1000 MΩ min. Initial
4	Dielectric withstanding Voltage	Apply AC 300V Voltage for 1 minute and then test between adjacent contacts of mated specimens. (EIA-364-20)	No Breakdown Current leakage: 0.5 mA max.

MECHANICAL REQUIREMENT

5	Mechanical vibration	15 minutes in each of 3 mutually perpendicular planes between 20 to 500Hz. (EIA-364-28)	1.No evidence of physical damage. 2.Discontinuity < 1μsec
6	Mechanical shock	Three shocks in each direction applied along 3 mutually perpendicular planes,18 total shocks. (EIA-364-27)	1.No evidence of physical damage. 2.Discontinuity < 1μsec
7	Durability	Mate and unmate specimens for 100 cycles at a maximum rate of 500 cycles per hour. (EIA-364-09)	Appearance: Nodamage

			Shell meet requirements of LLCR test.
8	Transceiver insertion force	Measure force necessary to insert the transceiver into the receptacle with kick-out springs inoperable at a maximum rate of 25.4mm per minute. (EIA-364-13)	40N Max.
9	Transceiver extraction force	Measure force necessary to extract the transceiver into the receptacle with kick-out springs inoperable at a maximum rate of 25.4mm per minute. (EIA-364-13)	12.5N Max.
10	Cage press-fit insertion force	12.7mm/min Measure force necessary to press the specimen onto the PCB into proper seating location at a maximum rate of 12.7mm per minute.	30 N maximum per pin for connector/cage assembly (Lower limit of finish hole size， Surface finish :ImmSn)
11	Cage press-fit extraction force	Measure force necessary to extract the specimen from the PCB at a maximum rate of 12.7mm per minute.	4N Min per pin for cage EON (Upper limit of finish hole size，Surface finish :OSP)
12	Cage latch strength	Measure force necessary to remove SFP module from cage assembly with latches enabled. (EIA-364-98)	180N Min.
13	Transceiver retention	Measure force necessary to remove SFP module from cage assembly with latches enabled at a maximum rate of 25.4mm per minute.	90-170N（No damage to transceiver below 90N)
14	Reseating	Manually plug and unplug the connector 3 cycles.	No evidence of physical damage.

ENVIRONMENT PERFORMANCE AND OTHERS

15	Thermal shock	Subject mated specimens to 10 cycles between -55 and 105°C with 30 minute dwells at temperature extremes and 1 minute transition between temperatures. (EIA-364-32)	No evidence of physical damage, and meet the other additional test requirements specified in the test group.
16	Humidity/Temperature cycling	Subject mated specimens to 10 cycles(10 days) between 25 and 65°C at 90 to 95% RH. (EIA-364-31)	No evidence of physical damage, and meet the other additional test requirements specified in the test group.
17	Temperature life	Subject specimens mated to 105°C for 250 hours (EIA-364-17)	No evidence of physical damage, and meet the other additional test requirements specified in the test group.
18	Mixed flowing gas	Subject specimens to environmental Class IIA for 20 days(10 days unmated followed by 10 days mated) (EIA-364-65)	No evidence of physical damage, and meet the other additional test requirements specified in the test group.
19	Salt Spray	Subject mated connector to salt solution concentration shall be 5% and air supply 35ºC for 48 hour. (EIA-364-26,Test condition B)	Appearance: Nodamage