

SPECIFICATION AND PERFORMANCE

Series	115F-SERIES 2	File	115F-SERIES 2_SPEC_1	Date	2016/01/20
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Scope:

This specification covers the requirements for product performance, test methods and quality assurance provisions of :

PART NUMBER	DESCRIPTION
115F-AAA2	HINGE TYPE, 6+2 PIN, G/F, REEL, W/ PEG, W/SWITCH, W/LOGO
115F-AAA3	HINGE TYPE, 6+2 PIN, G/F, REEL, W/O PEG, W/SWITCH, W/LOGO
115F-P1401014	HINGE TYPE, 6+2 PIN, G/F, REEL, W/ PEG, W/SWITCH, W/LOGO, 8.6 TYPE

Performance and Descriptions:

The product is designed to meet the electrical, mechanical and environmental performance requirements specification. Unless otherwise specified, all tests are performed at ambient environmental conditions.

RoHS:

All material in according with the RoHS environment related substances list controlled.

MATERIAL AND FINISH		
INSULATOR	Material	LCP UL94V-0, Black
CONTACT	Material	Contact: Phosphor Bronze C5210
	Plating	Gold Flash plating on contact area, Tin plating on solder tails, Nickel under-plating overall.
COVER	Material	LCP UL94V-0, Black
RATING	Voltage Rating: 30V DC per pin Max. Current Rating: 0.5A per pin Min. Operating Temperature : -25°C to +85°C Storage Temperature : -25°C to +85°C	

ELECTRICAL		
Item	Requirement	Test Condition
Contact Resistance	Initial: 30mΩ Max. After test: 100mΩ Max.	(EIA 364-23) Subject mated contacts assembled in housing to 20mV maximum open circuit at 100 mA maximum The object of this test is to detail a standard method to measure the electrical resistance across a pair of mated contacts such that the insulating films, if present will not be broken or asperity melting will not occur.
Insulation Resistance	1000MΩ Min.	(EIA 364-21) Apply a 500V DC between adjacent terminals and between terminals to ground
Dielectric Withstanding Voltage	500V AC for 1 minute at sea level, No flashover or insulation breakdown	(EIA 364-20) Apply a voltage 500V AC R.M.S for 1 minute between adjacent terminals and between terminals to ground.

MECHANICAL		
Item	Requirement	Test Condition
Contact Normal Force	0.2N min. per Pin	Apply perpendicular force to terminal at the rate of 12.5mm/min. Measure contact normal force at working height, read at return curve.
Durability	No abnormal Contact Normal force: 0.2N min. pre Pin Contact Resistance: 100mΩ Max.	Mate and unmate connector to 5000 cycles. Take reading at 5000 cycles. 1 cycles (card loaded)= lid closed-> lid locked-> lid unlocked-> lid opened Exchange the actually card every 2000 cycles.

ENVIRONMENTAL		
Item	Requirement	Test Condition
Vibration	No abnormal. Contact Resistance: 100mΩ Max. Discontinuity: 1 microsecond Max.	(EIA-364-28) Amplitude: 1.52mm P-P or 1.47mm/s ² Sweep time: 10~ 55~ 10Hz in 20 minutes Duration: 12 time in each (total of 36 times) Electrical: DC 100 mA current Load shall be flowed during the test
Thermal Shock	No abnormal. Contact Resistance: 100mΩ Max.	(EIA 364-32 I) Subject mated connectors should be tested according to the condition listed below: Temperature: -25 to 85°C Cycles: 5 cycles Exposure time at temp. Extremes: 30 minutes.
Salt Spray	No abnormal.	Subject mated connectors to 24 hours Min. at 35°C with 5%-Salt-solution concentration.
Humidity	No abnormal.	(EIA 364-31) Mate a dummy card and expose to 60±2°C for 96 hours Relative humidity 90. 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 be performed
Heat Resistance	No abnormal.	(EIA 364-17) Mate a dummy card and expose to 70±2°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.

SOLDER ABILITY		
Item	Requirement	Test Condition
Solderability	The surface of the portion to be soldered shall at least 95% covered	(EIA 364-52) After one hour steam aging. The object of test procedure is to detail a uniform test methods for determining sim card connector solderability. The test procedure contained here utilizes the solder dip technique. It is not intended to test or evaluate solder cup, solder eyelet, other hand-soldered type or SMT type terminations.
Resistance to Soldering Heat	No mechanical defect on housing or other parts.	1).for MANUAL SOLDERING: Temperature : 380 ± 10°C Immersion duration : 3 ± 0.5 sec. 2).for REFLOW SOLDERING: Pre-heat : 150(Min)~200(Max) °C, 60 ~ 180 Seconds Temperature : 260 ± 5 °C Immersion duration : 10~ 40 sec.

