

SPECIFICATION AND PERFORMANCE

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| 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 : -40°C to +85°C Storage Temperature : -40°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 | | |
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| 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 | | |
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| 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: -40 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 | | |
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| 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. |

