

## SPECIFICATION AND PERFORMANCE

Series	115I-BEAA-RA1	File	115I-BEAA-RA1_SPEC	Date	2014/06/12
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### Scope:

This specification covers the requirements for product performance, test methods and quality assurance provisions of 115I-BEAA-RA1

### 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.

### MATERIALS

NO.	PART NAME	DESCRIPTION
1	HOUSING	LCP UL94V-0 Black
2	CONTACT	Phosphor Bronze C5210, contact area :15u" min Gold Plated, Solder Tail: Gold Flash(0.6u" min)
3	SHELL	Stainless Steel, Solder Tail: Tin 100u" min Plated
4	SWITCH	Brass C2680, contact area :5u" min Gold Plated, Solder Tail: Gold Flash(0.6u" min)

### RATING

Rated Voltage	0.5A
Rated Current	10VDC
Operating Temperature	-40°C to +85°C
Storage Temperature	-40°C to +85°C
Durability	500Cycle

### ELECTRICAL

Item	Requirement	Test Condition
Contact resistance	100mΩ max.	Mated connectors, measure by dry circuit (20mV ,100mA ) Between Detect Spring and Detect Contact
Insulation resistance	1000MΩ min.	100V DC is applied between any open contacts.

Dielectric withstanding voltage	No breaking insulation	500V AC is applied between an open contacts for 1 minute. (Interrupting current : 2mA)
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### MECHANICAL

Item	Requirement	Test Condition
Card insertion force	10N(1.02kgf) Max	Insert the card at a speed rate of 25+/-3mm/min
Card withdrawal force	0.5N(0.05kgf) Min	Withdraw the card at a speed rate of 25+/-3mm/min
Contact Normal Force	Initial: 0.35N Min After test: 0.30N Min 1.15N (REF) max	Apply perpendicular force to terminal at the rate of 12.5mm/min, measure contact normal force at 0.27mm working height. (Test method reference below)
Durability	500 cycles	Mate and unmate connectors to 500 cycles at a maximum rate of 720 cycles/hour.

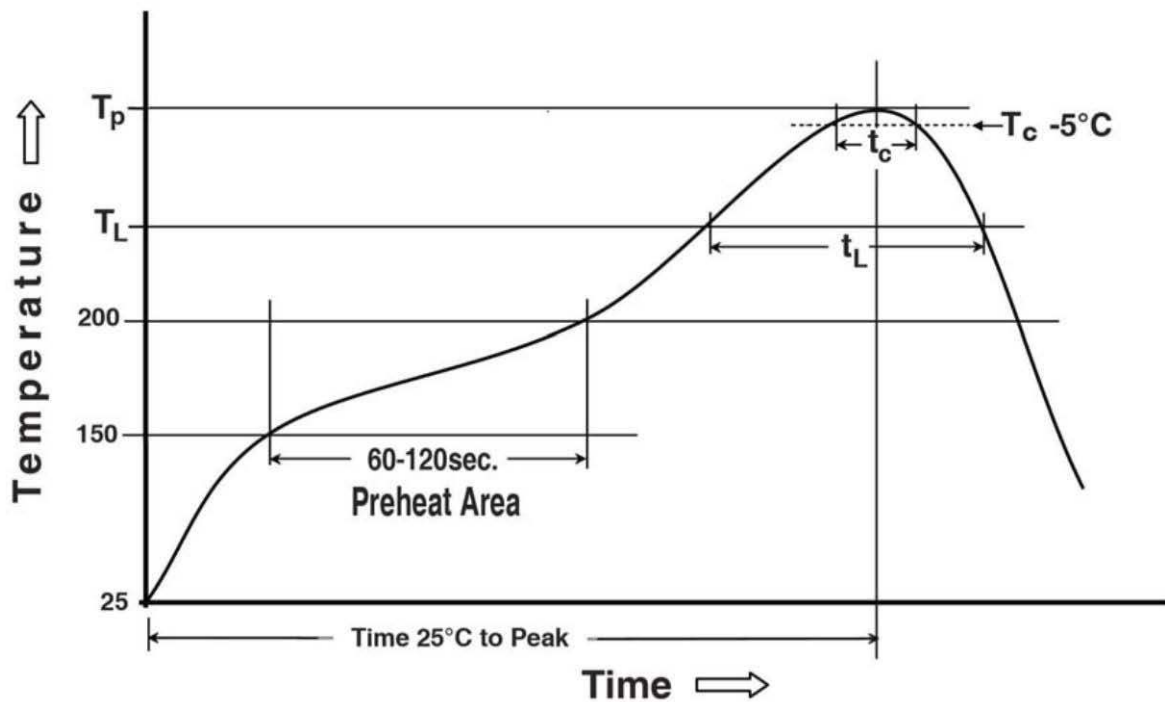
### ENVIRONMENTAL

Item	Requirement	Test Condition
Temperature Life	No breaking	At +85°C For 120 Hours
Thermal Shock	No breaking	-55°C + 105°C, 30 Minutes at each Temperature for 5 cycles
Salt Spray Test	No damage	Salt concentration: 5±1% Testing time: 48±2 hours Temperature: 35±2°C After salt is removed by running water and a drop is removed, it is measured.
Humidity test	No damage	25~65°C in temperature and 80~95% RH for 96 hours. After testing connector shall be left alone for 1~2 hours in a room ambient.

### SOLDER ABILITY

Item	Requirement	Test Condition
Solder ability	95% solder coverage	Soldered at temperature 255°C±5°C For immersion duration "5S"
Resistance to Soldering reflow Heat	260°C 10Sec	

## Reflow Profile



Preheating temperature: 150 ~ 200°C, 60~ 120 seconds  
 Liquidus temperature ( $T_L$ ): 217°C, 60~ 150 seconds  
 Peak temperature: 260°C  
 Time within 5 °C of peak temperature ( $T_c$ ): 255°C, 30seconds