

PRODUCT SPECIFICATION**PS-R914****Rev. A****ORIGINAL****Title: RJ45 Express Connectors****Part Number: RJMG1V2XXT101XR****Description: TOP ENTRY PCB JACK****Revisions Control**

Rev.	ECN Number	Originator	Approval	Issue Date
A	NE-13104	Jophy Li	Roger Tsai	7-9-2013

Product Specification Origination

Originator:	Date:	Checked by:	Date:	Approved by:	Date:
Jophy Li	2013.7.9	Roger Tsai	2013.7.9	Roger Tsai	2013.7.9

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1.0 SCOPE

This document contains specific electrical and mechanical requirements for the RJ45 express TOP ENTRY PCB JACK connector to insure functionality and reliability.

0.5 APPLICABLE DOCUMENTS

The following document, of the latest issue in effect at the time of performance of the qualification tests, shall form a part of this specification to the extent specified herewith.

EIA-364	Test methods for electrical connectors
MIL-STD-202F	Test methods for electrical component parts

Underwriters' Laboratories, Inc.

UL-STD-94	Tests for flammability of plastic materials for parts in devices and
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3.0 REQUIREMENTS**3.1 Materials****3.1.1 Housing, IN'S**

- High temperature thermoplastic, UL94V-0 rated
- Color- Black

3.1.2 Contacts

- Phosphor bronze
- Contact area- Gold 30μ"minimum or
- Solder area- Tin plating
- Under plate - Nickel under plating overall

3.1.3 Shield

- BRASS
- Nickel Plating

3.1.4 Transformer

- PCB
- CORE
- GLUE SHELL
- PIN
- BLACK GLUE
- SOLDER WIRE
- ENAMELED WIRE
- RESISTOR
- CAPACITOR

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3.2.1 Voltage: 150 Volts AC(RMS)/DC.

3.2.2 Current: **1.5A** maximum per contact3.2.3 Operating Temperature: **0°C ~ 70°C**3.2.4 Shipping and Storage Temperature: **-40°C ~ 85°C****3.3 Test Requirements and Procedures Summary**

TEST ITEM		REQUIREMENT	PROCEDURE
1	Examination of Product	Meets requirements of product drawing. No physical damage.	Per EIA-364-18 Visual, dimensional and functional inspection
ELECTRICAL REQUIREMENT			
2	Dielectric withstanding Voltage	No Breakdown	Per EIA-364-20 Subject mated connector with a. voltage of 1500VAC for 1 minute between input to output.
3	LCR Test	No Breakdown	
MECHANICAL REQUIREMENT			
TEST ITEM		REQUIREMENT	PROCEDURE
4	Mating force	20 N maximum per contact pair	Per EIA-364-13 Insertion speed at 25±3mm per minute
5	Unmating force	80 N minimum per contact pair	Per EIA-364-13 Withdraw speed at 25±3mm per minute
6	Durability	No defects & Transformer test OK	Per EIA-364-09 Perform 750 cycle unplug/ plug cycles

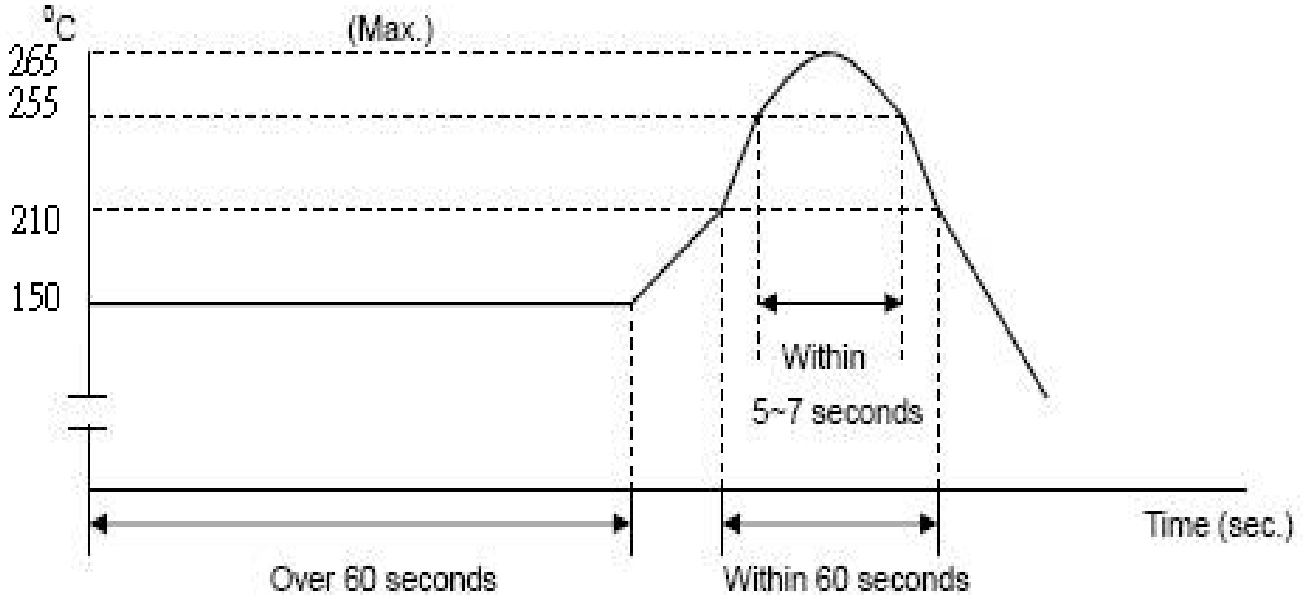
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ENVIRONMENTAL REQUIREMENTS			
7	Salt Spray	No detrimental corrosion allowed in contact area and base metal exposed & LCR test OK	Per EIA-363-26, test condition B Subject mated connectors to 35 ± 2°C and 5 ± 1% salt condition for 24 hours . After test, rinse the sample with water and recondition the room temperature for 1 hour .
8	Solderability	95% of immersed area must show no voids and pin holes	Per EIA-364-52 Soldering time: 4-5 second (Use flux) Solder Temperature: 245±5°C
9	Resistance to reflow soldering Heat	No damage&LCR test OK	IR temperature 260±5°C max

3.4 Recommended IR Reflow Profile(Lead-free)



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3.5 PRODUCT QUALIFICATION AND REQUALIFICATION TEST SEQUENCE

Test or Examination	Test Group						
	A	B	C	D	E	F	G
	Test Sequence (a)						
Examination of Product	1,5	1	1	1,5	1,5	1,5	1,5
Dielectric withstanding Voltage	3						
LCR Test	2,4			2,4	2,4	2,4	2,4
Mating force		2					
Unmating force			2				
Durability				3			
Salt Spray					3		
Solderability						3	
Resistance to reflow soldering Heat							3
Sample size	2	2	2	2	2	2	2

NOTE : (a) Numbers indicate sequence in which tests are performed.
 (b) Discontinuities shall not take place in this test group, during tests.

List of Appendix

Product Drawing RJ45 series, TOP ENTRY PCB JACK.