

APPROVAL SHEET

To : _____

Spec No. : _____ Date : _____

UDE P/N

Customer P/N

RB1-125BHQ1A

Description : **RJ45 1x1 Tab Down**
w/ Transformer 10/100Base-T **w/LED**
for POE Application

RoHS Compliant

	Approved	Checked	Prepared
Name Date			

U D E

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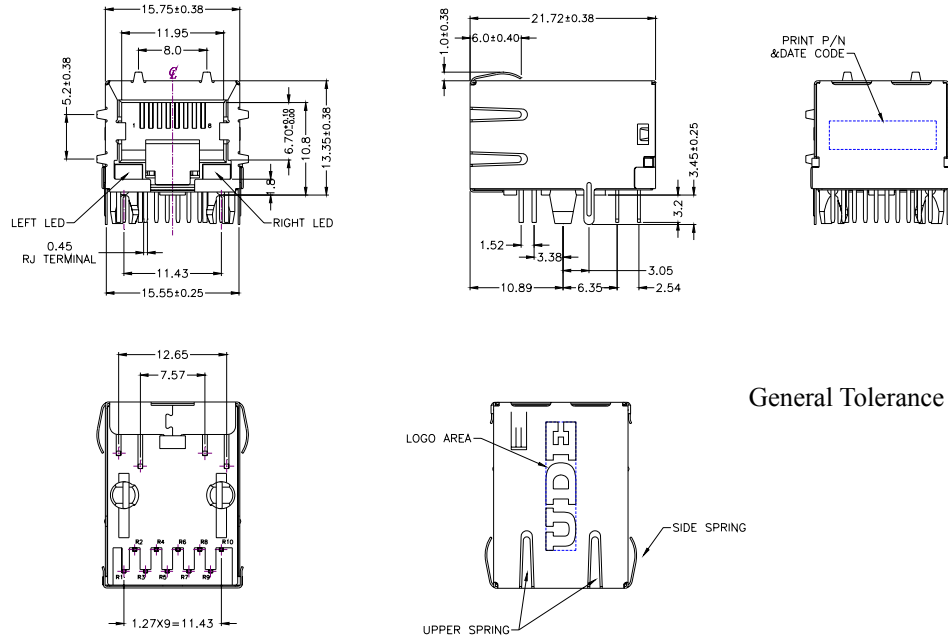
FAX : +886-3-3560611

Rev : **XA**

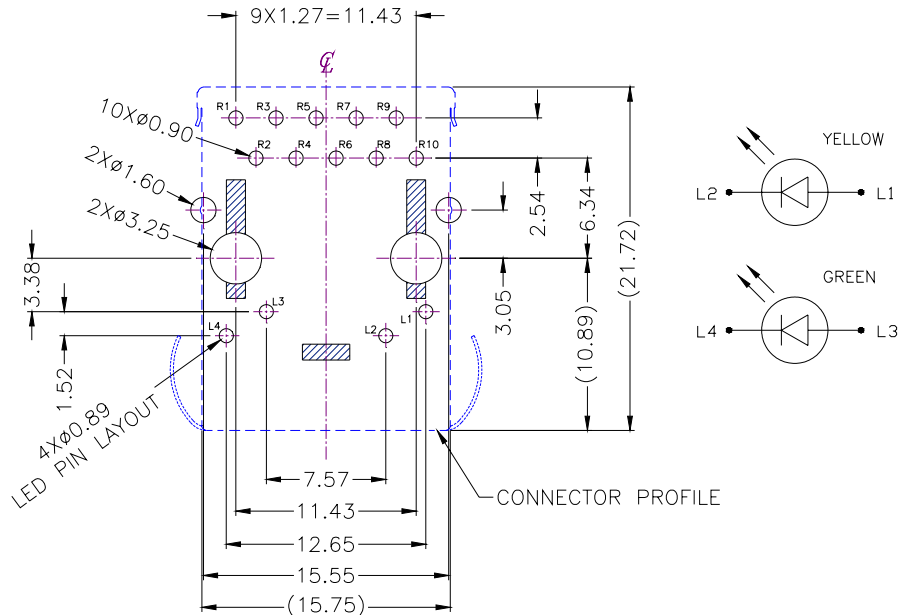
Update Date : **2007/11/16**

1. MECHANIC DIMENSIONS

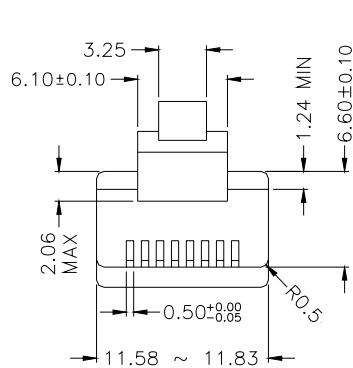
1.1 Dimensions



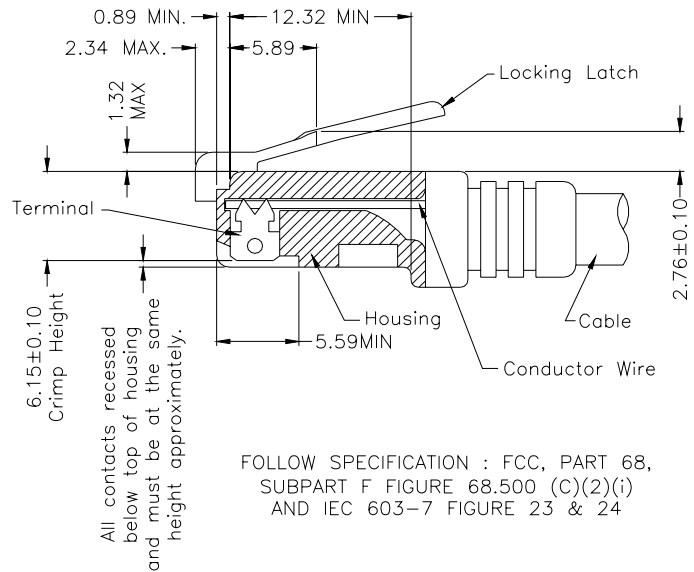
1.2 PCB Layout



1.3 RJ PLUG SPECIFICATION

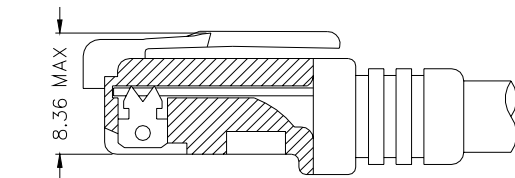


- * There must be no damage to housing or locking latch. There must be no nicks or cuts in cable.
- * Durability : 750 cycles generally



FOLLOW SPECIFICATION : FCC, PART 68,
SUBPART F FIGURE 68.500 (C)(2)(i)
AND IEC 603-7 FIGURE 23 & 24

STANDARD MODULAR PLUG ASSEMBLY



FOLLOW SPECIFICATION : FCC, PART 68, SUBPART F
FIGURE 68.500 (C)(2)(ii)

2. REQUIREMENTS

2.1. Design and Construction

Product shall be of design, construction and physical dimensions specified on applicable

2.2. Materials

2.2.1. Terminal Parts :

2.2.1.1. RJ Terminal : Phosphor Bronze , Thickness=0.30mm

Finish : (a) Contact Area : Gold Flash

(b) Solder tail Area : 100μ" min. Tin

(c) Underplating : 50~100μ" Nickel over all

2.2.1.2. Input Terminal : Brass , Thickness=0.35mm

Finish : 100μ" min. Tin over 50~100μ" min. Nickel

2.2.1.3. Link Terminal : Brass , Thickness=0.25mm

Finish : 100μ" min. Tin over 50~100μ" min. Nickel

2.2.2. Plastic Parts :

2.2.2.1. Housing : High temp. Thermoplastic, Black

UL FILE No. : E47960

Grade : TE250F6

Flame Class : UL94 V-0

2.2.2.2. Coil Case : High temp. Thermoplastic, Black

SPEC NO. :		REV. : XA	ECN NO. :		PAGE :	2 / 6
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UL FILE No. : E47960

Grade : TE250F6

Flame Class : UL94 V-0

2.2.2.3. Cover : Thermoplastic , PBT , Black

UL FILE No. : E59481

Grade : PBT-4830

Flame Class : UL94 V-0

2.2.3. Shell Parts :

2.2.3.1. Shell : Stainless, Thickness=0.20mm

Grounding Leg : Pre-soldering

2.3. Operating and Storage Temperature

2.3.1. Operating Temperature : 0 TO +70

2.3.2. Storage Temperature : -40 TO +85

2.4. RJ45 specifications:

2.4.1. Insulation Resistance: 500MΩMin

2.4.2. Dielectric Withstanding Voltage: 1000VAC Min

2.5. Performance and Test Description

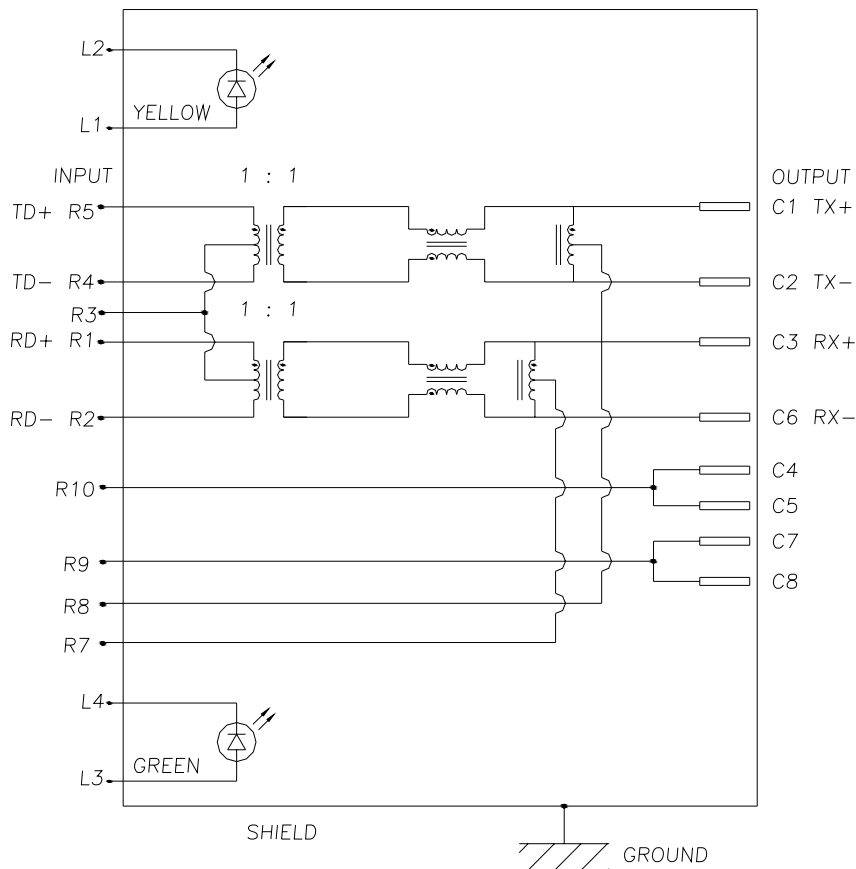
Product is designed to meet electrical, mechanical and environmental performance requirements specified in below table. All tests are performed at ambient environmental conditions per MIL-STD-1344A and EIA-364 unless otherwise specified.

2.6. Packaging and Packing

All parts shall be packaged and packed to protect against physical damage, corrosion and deterioration during shipment and storage.

3. ELECTRICAL CHARACTERISTICS

3.1 SCHEMATIC



3.2 Transmitter filter & Receiver filter

Type : Balance low pass 100Ω impedance

Insertion loss : 1~100 MHz -1.0dB MAX.

Return loss : 1~30 MHz -18dB MIN. load 100Ω

30~60 MHz -16dB MIN. load 100Ω

60~80 MHz -12dB MIN. load 100Ω

3.3 Common Mode Rejection

@ 1~100 MHz -30dB MIN.

3.4 Cross Talk

@ 1~100 MHz -30dB MIN

3.5 INDUCTANCE @ 100KHz, 0.1V, 8mA DC BIAS

Input(R5-R4), Input(R1-R2) : 350μH MIN.

3.6 HiPot TEST

Input(R5-R4) to Output(C1-C2) : 1200VAC, 60sec

Input(R1-R2) to Output(C3-C6) : 1200VAC, 60sec

SPEC NO. :		REV. : XA	ECN NO. :		PAGE :	4 / 6
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Product Number: RB1-125BHQ1A

4.ORDER INFORMATION

R B 1 - 1 X X X XXX X
A B C D E

A: LED Code

	Left LED		Right LED	
	-L3/+L4	+L3/-L4	-L1/+L2	+L1/-L2
0	w/o	w/o	w/o	w/o
1	Green		Yellow	
2		Green		Yellow
3	Green		Green	Yellow
4	Yellow		Green	
5		Green	Yellow	Green
6	Green	Orange	Yellow	
7	Yellow		Green	Orange
8	Yellow		Orange	Green
9	Green	Orange	Green	
C	Green		Green	

B : Spring & Logo Code

		SPRING				
		W/ ALL DIM A=1.0	W/O ALL	TOP ONLY DIM A=1.0	W/ ALL DIM A=2.0	TOP ONLY DIM A=2.0
LOGO	W/O	0	1	2	3	4
	W/	5	6	7	8	9

C : Board Lock , Post & Side Leg Code

Board Lock Post Side Leg	None Green Product		Green Product	
	Board Lock	Post	Board Lock	Post
Rear Side Leg	1	4	B	F
Front Side Leg	2	5	C	G

D : Schematic type

HQ1 : HQ1 Circuit

E : Terminal Contact Area Plating Code

A : Gold Flash

SPEC NO. :		REV. : XA	ECN NO. :		PAGE :	5 / 6
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Dipping temperature profile

(Note) The measuring point for the specified temperature shall be on the soldered part of the leads

