

# APPROVAL SHEET

To : \_\_\_\_\_

Spec No. : \_\_\_\_\_ Date : \_\_\_\_\_

MAI P/N                      Customer P/N  
MRTA-364A1R1A                      \_\_\_\_\_

Description : RJ45 1x1 Tab up w/ Transformer  
10/100 Base-T  
w/ LED

GP :                      GREEN      PRODUCT

	Approved	Checked	Prepared
Name Date			

***M.A.I.***

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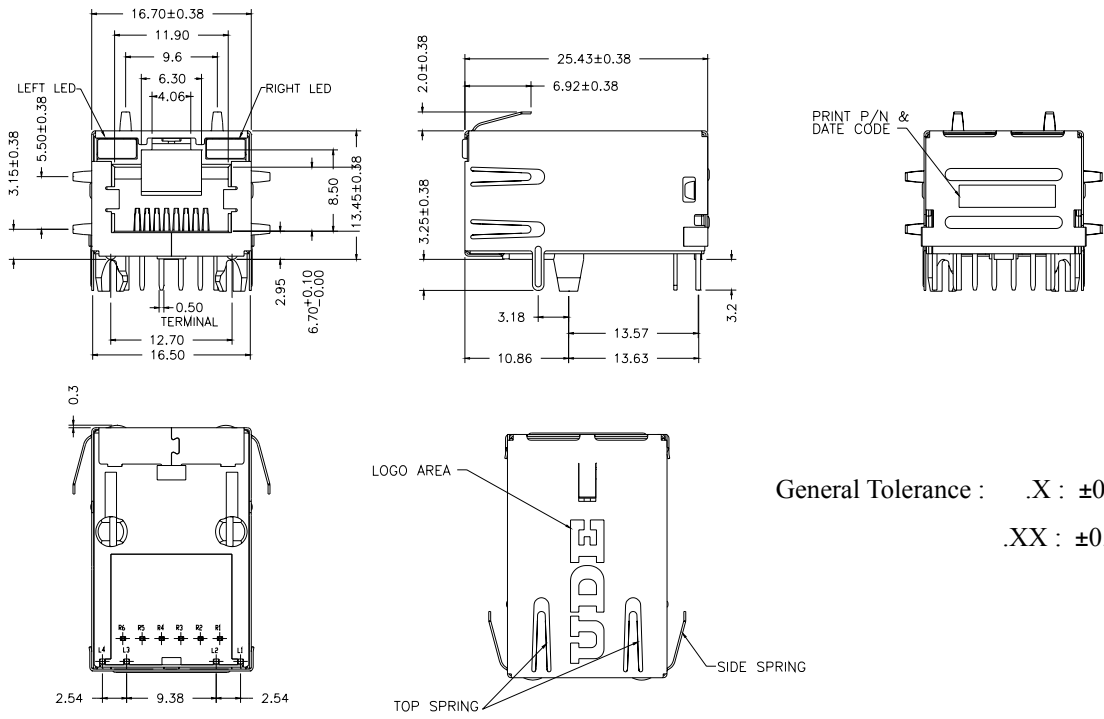
FAX : +408-686-0462

Rev : XA

Update Date : 2006/12/11

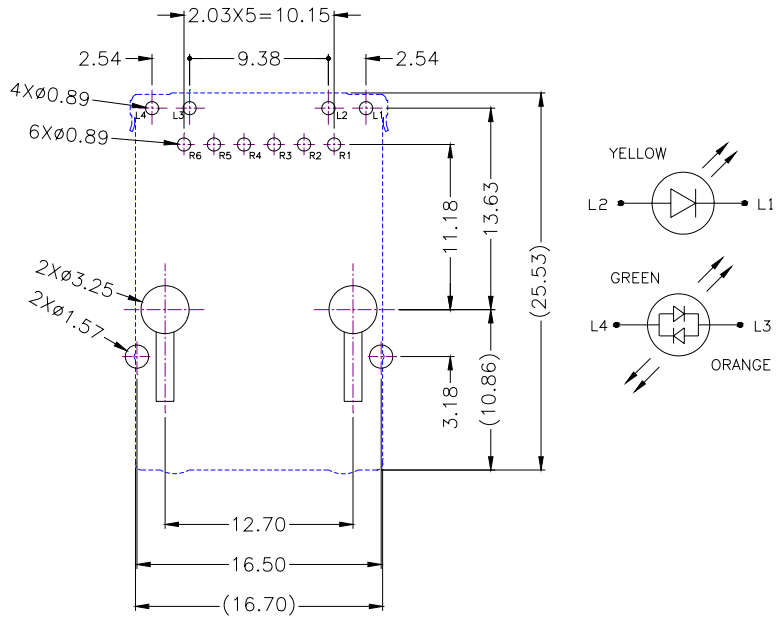
## 1. MECHANIC DIMENSIONS

### 1.1. Dimensions



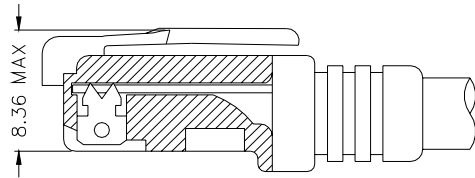
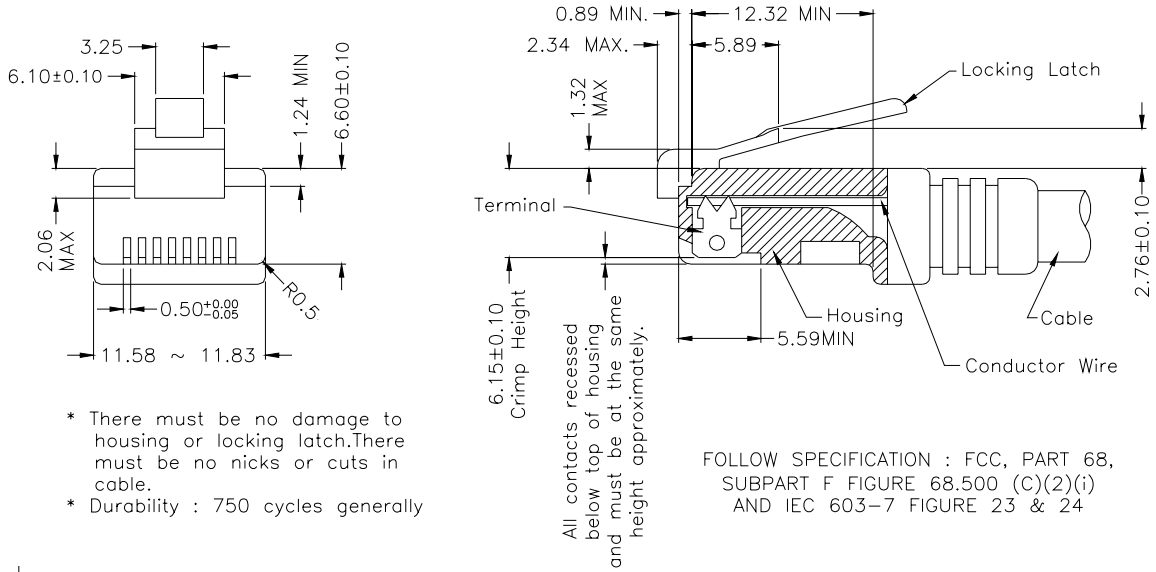
General Tolerance : .X : ±0.25  
 .XX : ±0.13

### 1.2. PCB Layout



RECOMMENDED PCB LAYOUT  
 COMPONENT SIDE  
 ALL DIMENSION TOLERANCE ARE ±0.05mm  
 UNLESS OTHERWISE SPECIFIED

### 1.3. RJ PLUG SPECIFICATION



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

STANDARD MODULAR PLUG ASSEMBLY

## 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 Module Terminal : Brass , Thickness=0.30mm

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

#### 2.2.2 Plastic Parts :

2.2.2.1 Housing : Thermoplastic , PA , Black

UL FILE No. : E47960

Manufacturer : DSM Engineering Plastics

Grade : TE250F6

Flame Class : UL94 V-0

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2.2.2.2 Coil Case : Thermoplastic , PA

UL FILE No. : E47960

Manufacturer : DSM Engineering Plastics

Grade : TE250F6

Flame Class : UL94 V-0

2.2.2.3 Cover : Thermoplastic , PBT

UL FILE No. : E59481

Manufacturer : Chang Chun Plastics Co Ltd

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

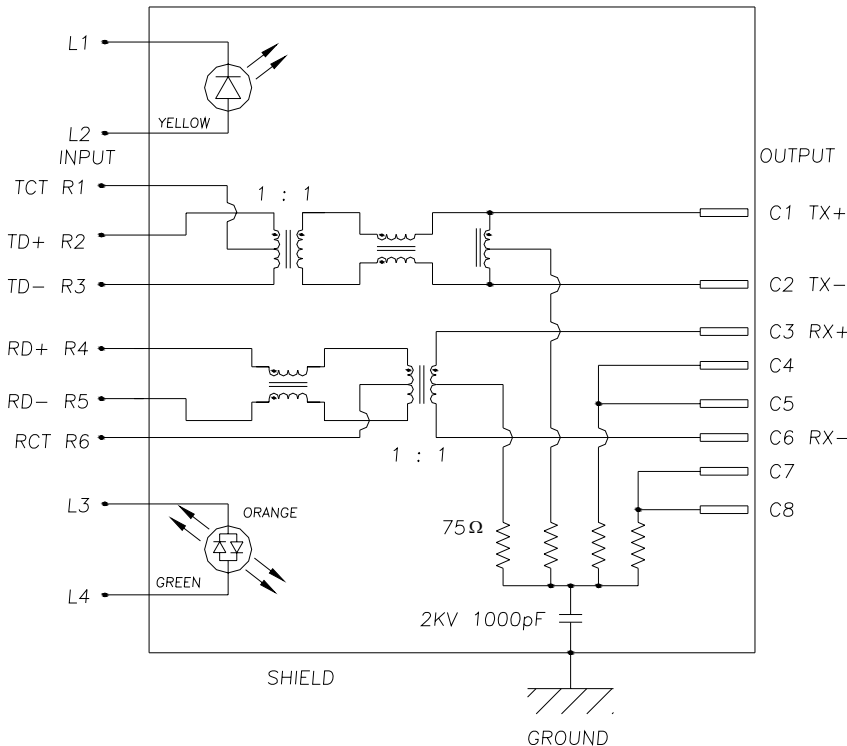
Product is designed to meet electrical, mechanical and environmental performance requirements specified in below table. All tests are performed at ambient environmental conditions per MIL-STD-1344A and EIA-364 unless otherwise specified.

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(R2-R3), Input(R4-R5) : 350μH MIN.

#### 3.6 HiPot TEST

Input(R2-R3) to Output(C1-C2) : 1500VAC, 60sec

Input(R4-R5) to Output(C3-C6) : 1500VAC, 60sec

4.ORDER INFORMATION

MR T A - 3 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	
S	Green	Yellow	Green	Yellow
B		Yellow		Green
C	Green		Green	

B: Spring & Logo Code

LOGO \ SPRING	W/O ALL	W/ ALL	W/ TOP ONLY
W/O	0	1	2
W/	3	4	5

C: Board Lock & Post Code

1 : Board Lock ( None Green Product )

2 : Post ( None Green Product )

**A : Board Lock (Green Product )**

B : Post (Green Product )

D: Schematic type

1R1 : 1R1 Circuit

E: Terminal Contact Area Plating Code

50~100u" Nickel Plating overall

Solder Tail : 100u" min. Tin

A : Gold Flash

D : 15u" Au

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F : 30u" Au  
G : 50u" Au

Dipping temperature profile

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

