



# Product Specification

WE ARE PLEASED IN SUBMITTING OUR SAMPLES WITH SPECIFICATION TO YOU FOR APPROVAL.

CUSTOMER: \_\_\_\_\_

DESCRIPTION: RJ45 2x1 L38.35xW17.17xH25.50mm  
1000BASE-T & PoE w/ LED & w/EMI Finger Gold Flash

MNC P/N: 21B708-51C0-00

VERSION: X0

CUSTOMER P/N: \_\_\_\_\_

ISSUED DATE: 2014.12.12

PHOTO OF PRODUCT: \_\_\_\_\_

WEIGHT: \_\_\_\_\_

MADE IN: CHINA

APPROVED BY MNC		
PREPARED BY	CHECKED BY	APPROVED BY

APPROVED BY CUSTOMER
SIGNATURE OR STAMP

- PLEASE SEND BACK US A COPY OF THE SPECIFICATION WITH YOUR STAMP OR SIGNATURE ONCE THE SAMPLES APPROVED.
- IT WILL BE DEEMED THE SAMPLES TO BE APPROVED IF NO FEEDBACK.

## HISTORY FOR REVISDE SPECIFICATION

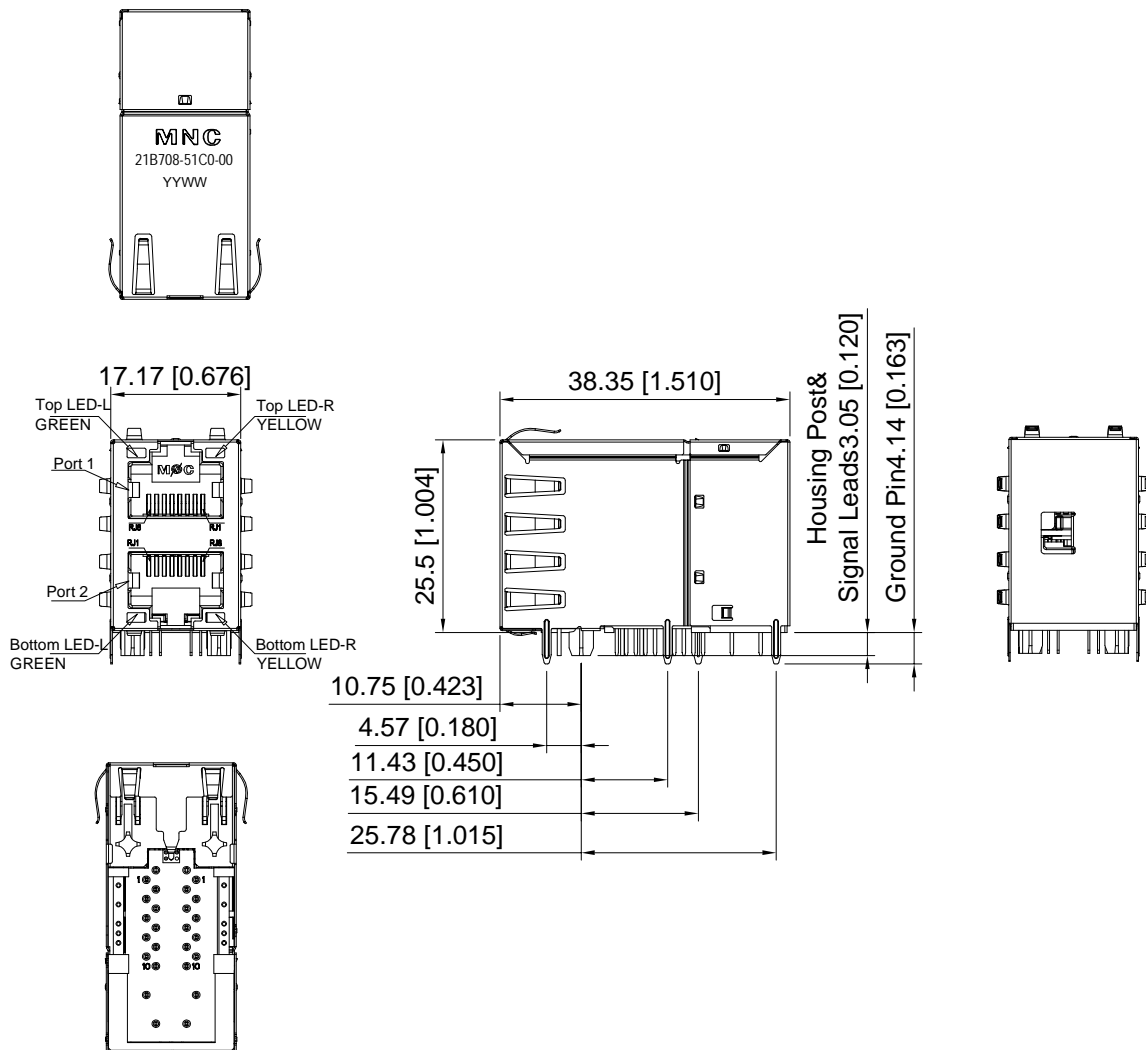
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## CHANGE RECORD

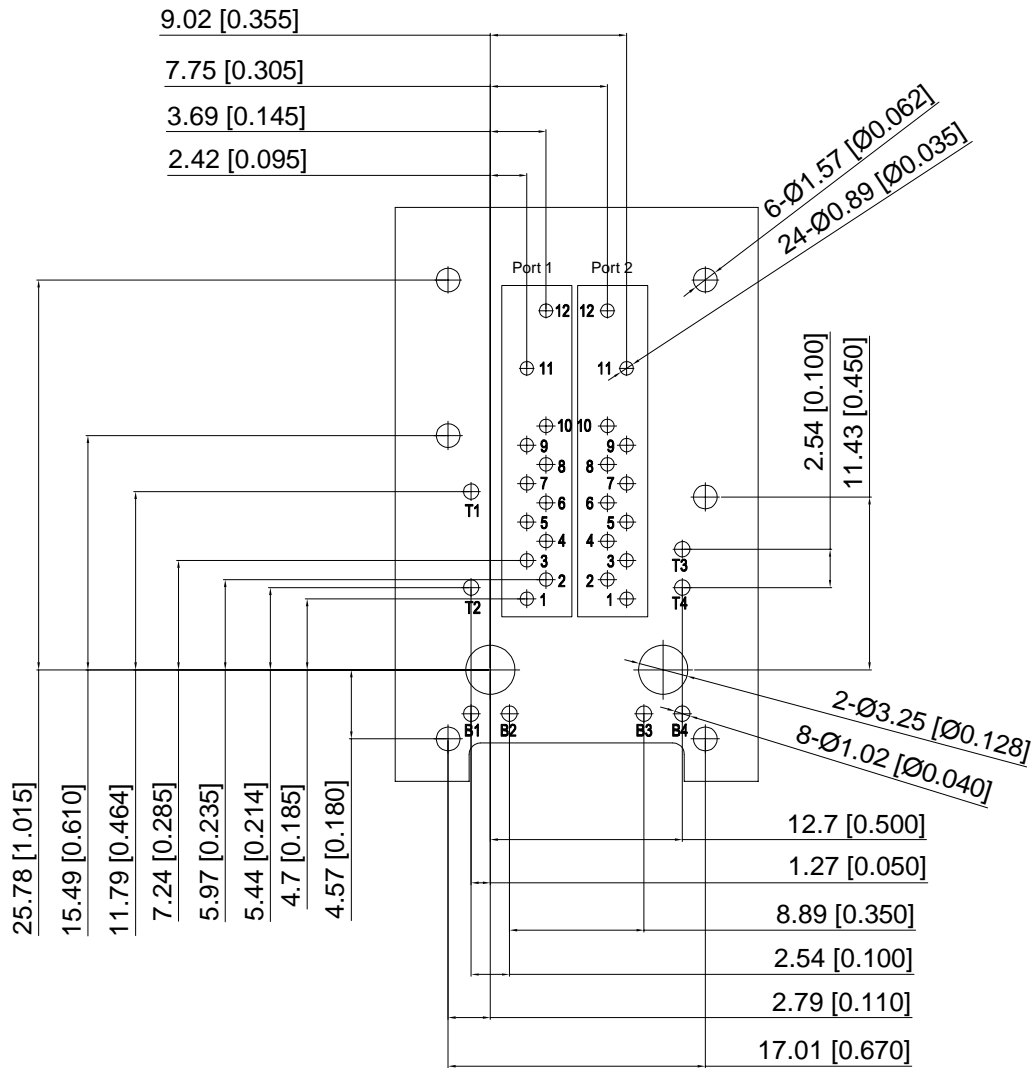
REV.	DESCRIPTION (Content or Reason For Change)	DATE	REVISER
X0	INITIAL RELEASE	2014-12-12	Liqian

1.MECHANICAL:



- UNITS:mm/inch.
- UNLESS OTHERWISE SPECIFIDE ALL TOLERANCES ARE:±0.25MM INCHES
- PIN LENGTH DON'T INCLUDE SOLDER POINT

## 2.RECOMMENDED PCB LAYOUT:



Top View Customer Board (COMP Side)

a. UNITS:mm/inch.

b. UNLESS OTHERWISE SPECIFIDE ALL TOLERANCES ARE:±0.05MM INCHES

Materials and Finish:

2.1 Housing: PBT,BK, Flammability Rating 94V-O.

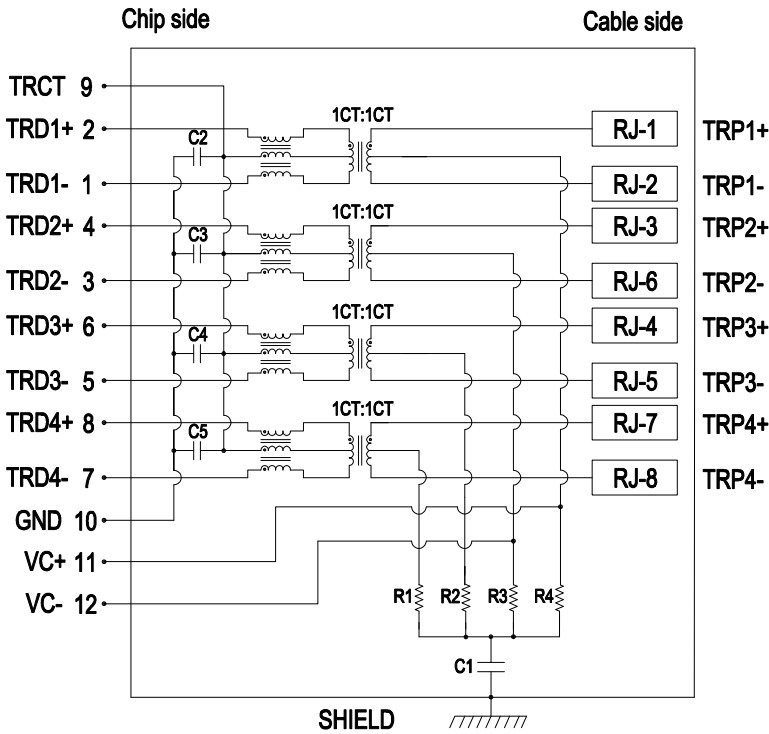
2.2 Insert Base: PBT,BK, Flammability Rating 94V-O.

2.3 Shell: Brass, nickel plating.

2.4 Mold Jack Contacts: Phosphor Bronze, Gold Flash.

2.5 LED: Diffused Epoxy Lens, 0.5x0.5mm Carbon Steel wireframe leads.

### 3.SCHEMATIC:



Layers	LED-L	LED-R
Top	Green T1 → T2	Yellow T3 → T4
Bottom	Green B1 → B2	Yellow B3 → B4

Note:  
R1-R4=75 OHMS, Resistors.  
C1=2KV 1000pF, Capacitor.  
C2-C5=50V 100nF, Capacitor.  
LED is with constant current at approx 20mA.  
LED color:  
Dominant wavelength( $\lambda$ D):  
Green=565nm TYP. at IF=20mA;  
forward voltage(VF): Green 2.2V TYP,at IF=20mA;  
Dominant wavelength( $\lambda$ D):  
Yellow=585nm TYP. at IF=20mA;  
forward voltage(VF): Yellow 2.1V TYP,at IF=20mA.  
Balanced DC line Current :  
350mA Max @57 VDC Continuous ;  
500mA Max @57 VDC for 200 Milliseconds

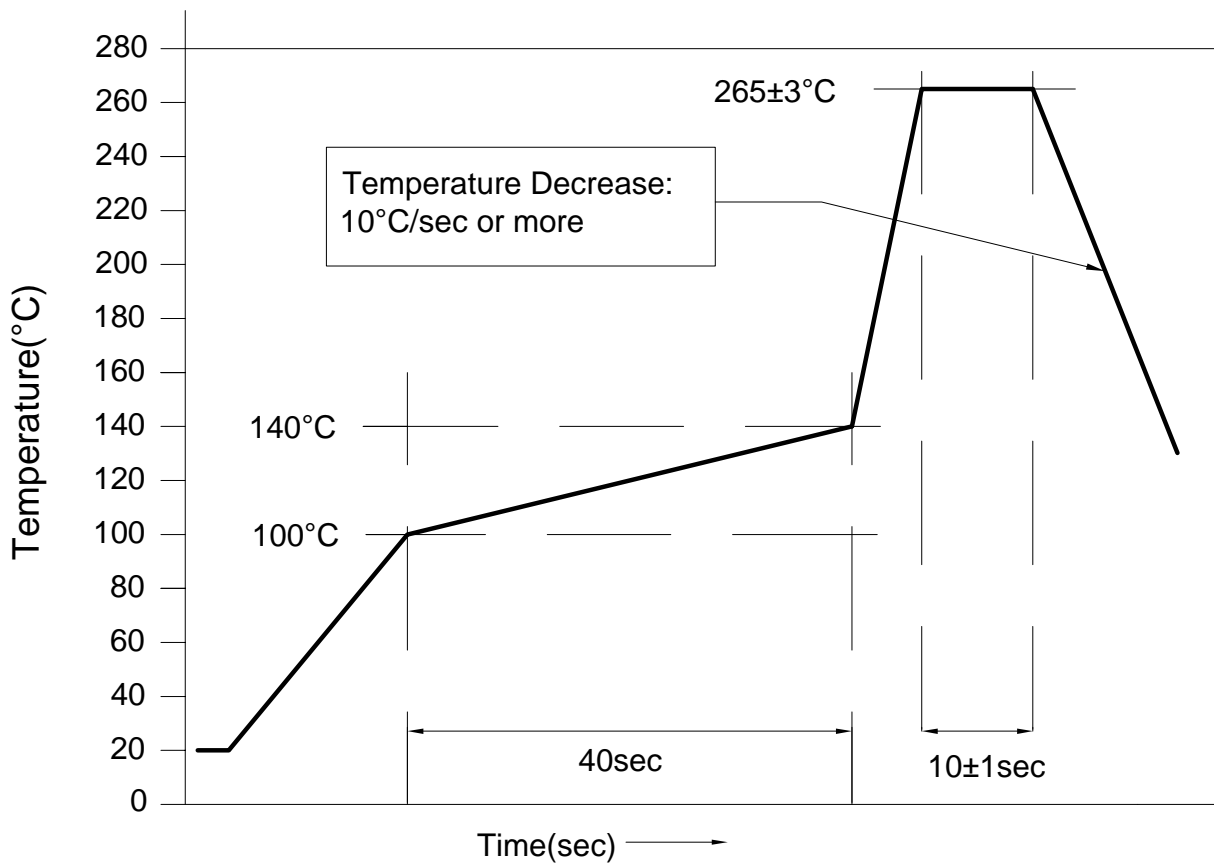
### 4.ELECTRICAL SPECIFICATION @ 25°C

Item	Specification	Test Condition
Application	10/100/1000BASE-T & PoE	
Inductance	350 $\mu$ H Min	100KHz 0.1V 8mA DC Bias @ 0°C to +70°C
Leakage Inductance	0.5 $\mu$ H Max	100KHz 0.1V
DC Resistance	1.5 $\Omega$ Max	
Turns Ratio	1CT:1CT (All Four Pairs)	100KHz 0.1V
Insertion Loss	-1.1dB Min	0.5-100 MHz
Return Loss	-18dB Max	0.5-40 MHz
	-12+20log(f/80)dB Max	40.1-100 MHz
Cross Talk	-35dB Max	0.5-40 MHz
	-33+20log(f/50)dB Max	40.1-100 MHz
CMRR:	-30dB Max	0.5-100 MHz
Isolation Hi-pot: (Complies with IEEE802.3 isolation requirements)	1mA Max	2250VDC
Operating Temperature	0°C to +70°C	

## 5.RECOMMENDED SOLDERING PROFILE:

a. Condition:

- a.1 Available for all the through whole parts
- a.2 Soldering method: Wave Soldering
- a.3 Solder: 99.3Sn-0.7Cu
- a.4 The recommended WAVE soldering curve is as below



### NOTE:

The measure point for the speccified temperature shall be on the soldered part of the lead