

# APPROVAL SHEET

To :

Customer P/N :

UDE P/N : S13-ZZ-0014

Description : RJ45 1X4 Tab Down

Through Hole

10/100 Base-T

Contact Area : 6 $\mu$ " Min. Gold

LED : L-Green; R-Yellow



Spec No.  
S1318027-00

Update Date  
2018/12/27

Revision  
A

| Approved | Checked | Prepared |
|----------|---------|----------|
|          |         |          |



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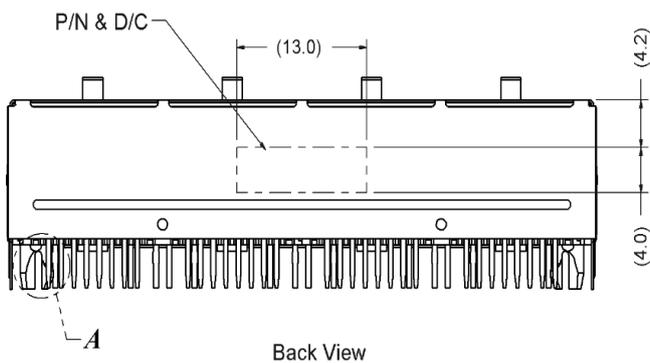
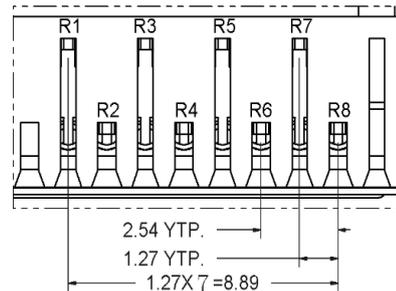
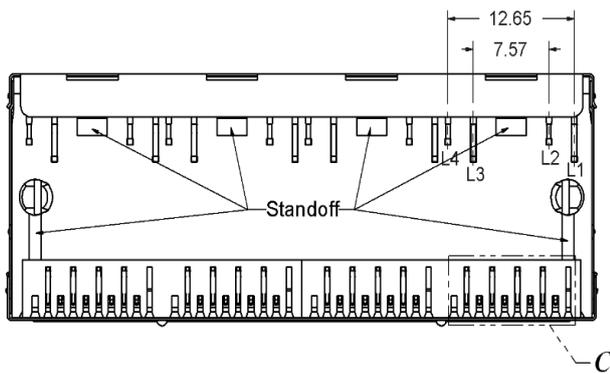
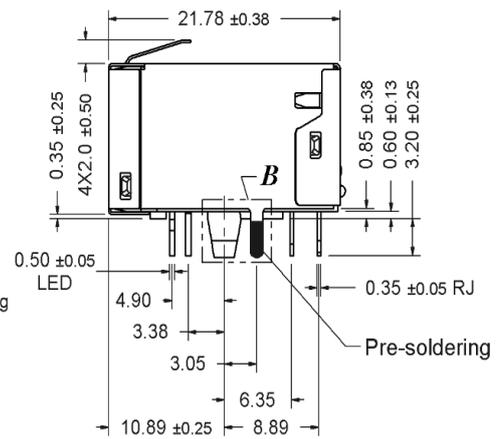
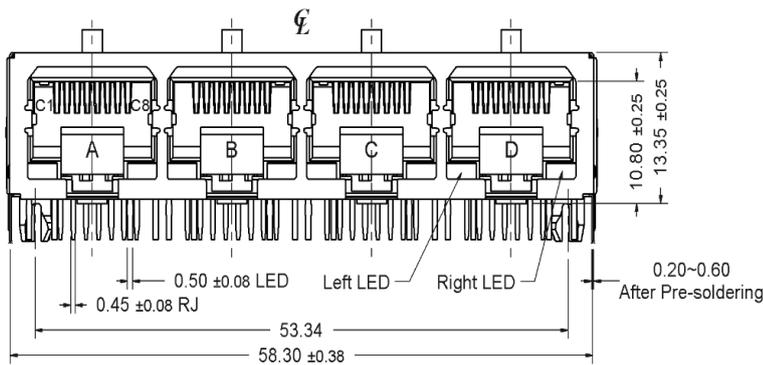
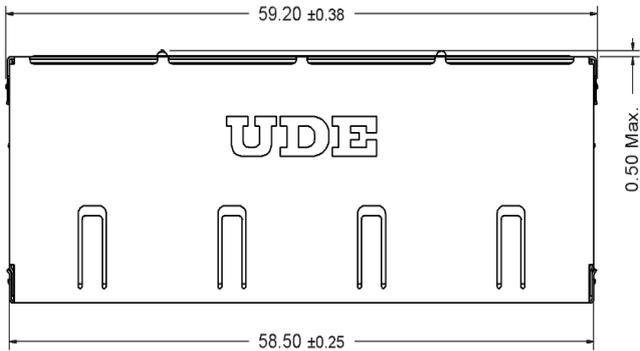
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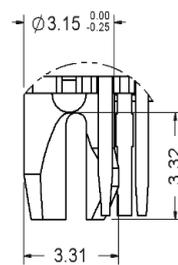
1. MECHANICAL DIMENSION

Product Dimension

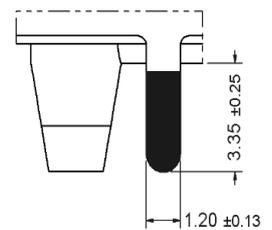
|         |                     |               |
|---------|---------------------|---------------|
| Unit:mm | General Tolerance : | X.X : ± 0.38  |
|         |                     | X.XX : ± 0.20 |



Back View



Detail A



Detail B

Recommended PCB Layout. Component side of board

All dimension units are "mm".

All dimension tolerances are ±0.05mm unless otherwise specified.

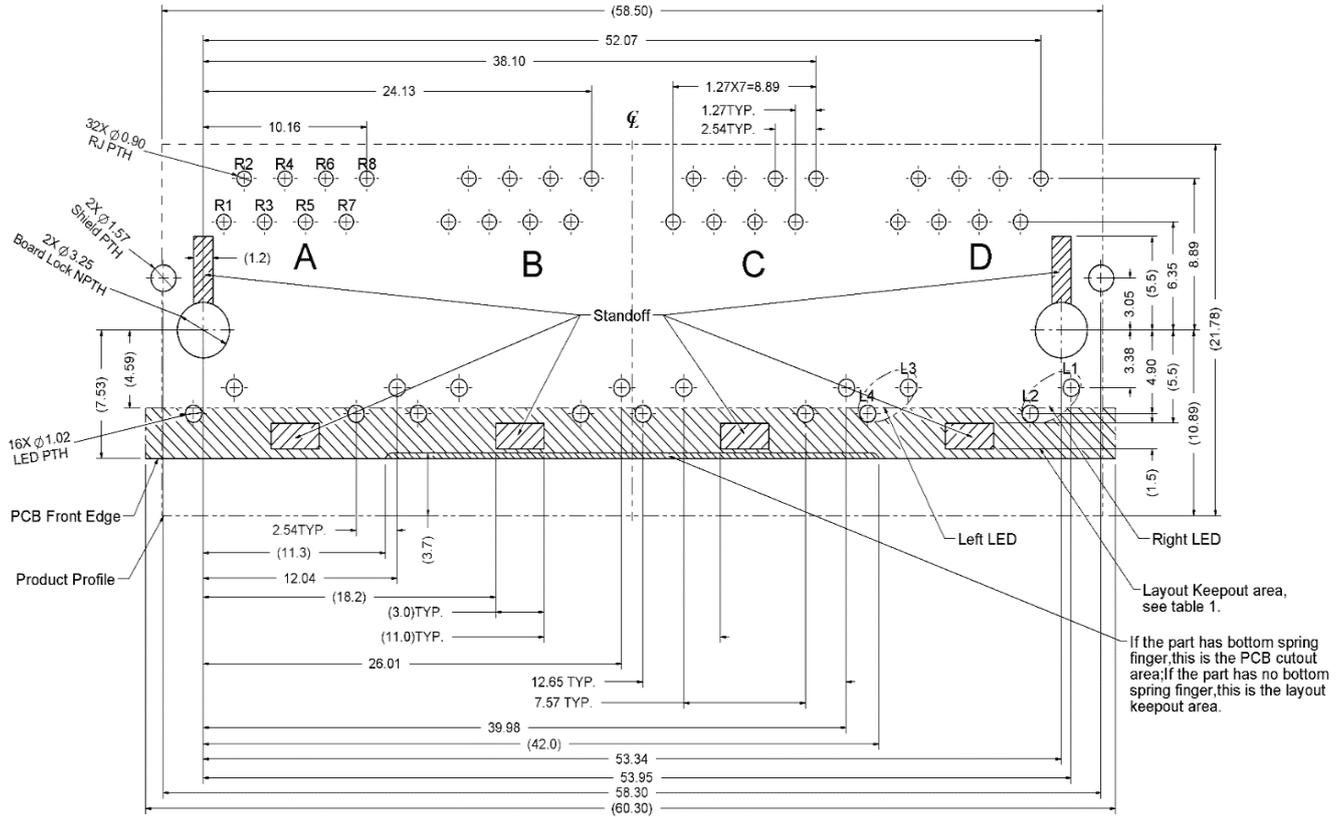
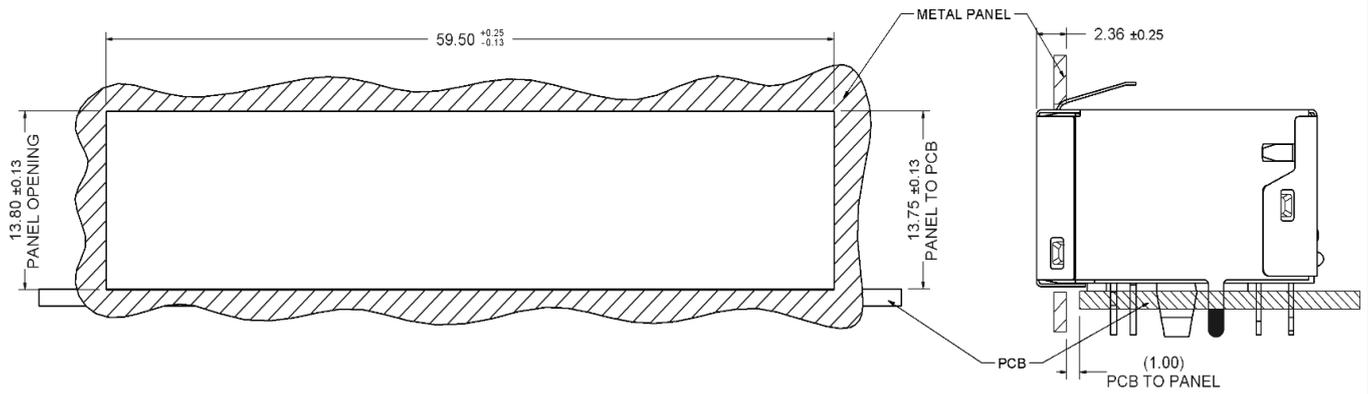


Table 1

| Layout Layer   | Trace | component | Grounding | Test Point | Via Hole | PTH | NPTH |
|----------------|-------|-----------|-----------|------------|----------|-----|------|
| Component side | X     | X         | O         | X          | X        | X   | O    |
| Inner layer    | O     | NA        | O         | NA         | O        | X   | O    |
| Bottom side    | O     | O         | O         | O          | O        | X   | O    |

X--Forbid; O--OK; NA--Not Applicable.

## Recommended Panel cutout



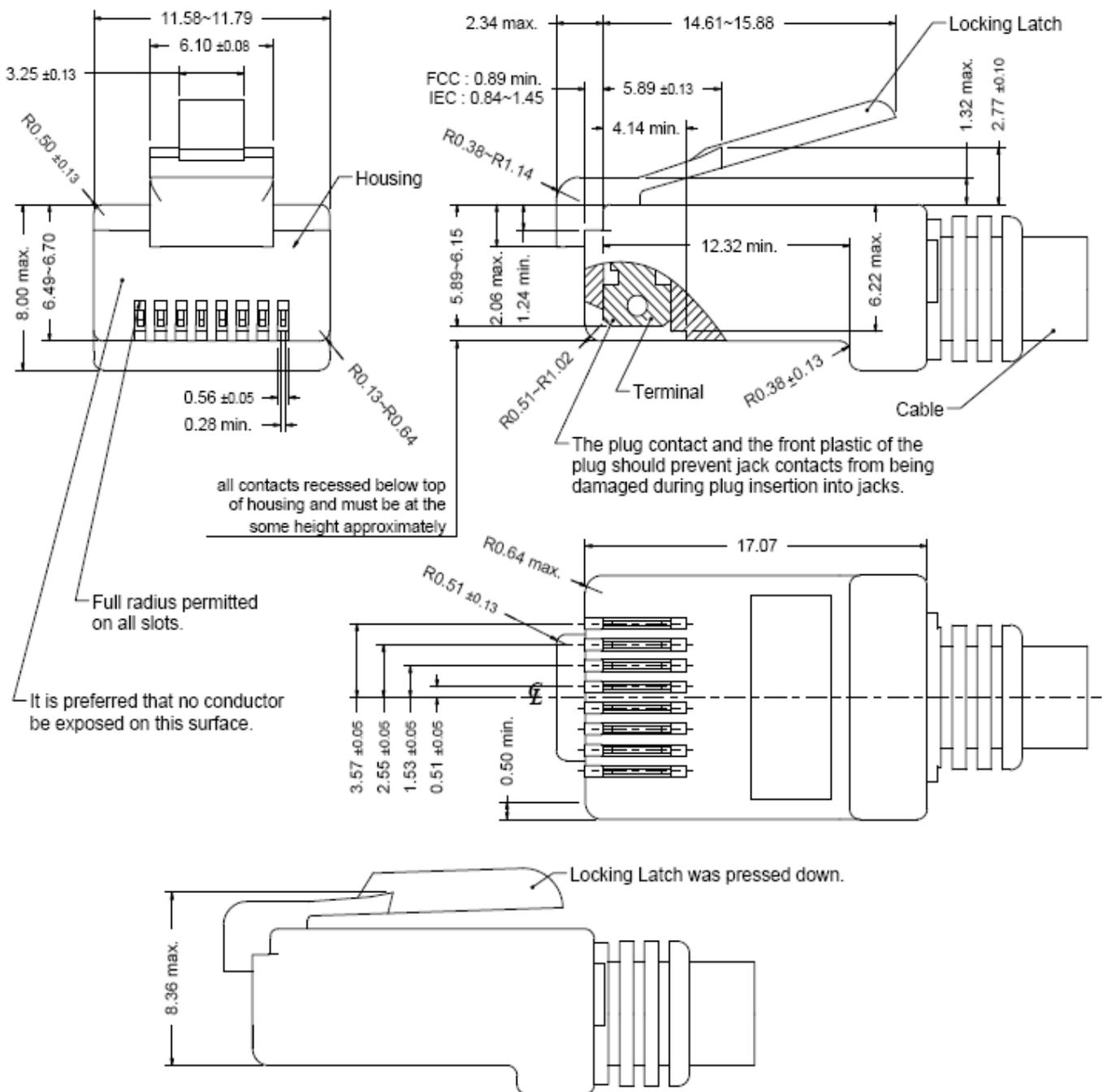
## 2. Packing Information

20 pcs finished goods per tray

7trays(140 pcs finished goods) per inner box

4 Inner boxes(560 pcs finished goods) per master carton

### 3. Standard RJ45 Plug Specification



- All dimensions follow :  
FCC subpart F, 68,500, Figure (C)(2)(i) & (C)(2)(ii) & (C)(3)(i)  
IEC 60603-7
- All plugs must be meeting the requirements of plug Go & No-Go gauge.  
Gauge follow : FCC subpart F, 68,500, Figure (C)(4)(i) & (C)(5)(i)
- There must be no damage to Housing and Locking Latch.
- There must be no nicks and cuts in cable.
- Durability : 750 cycles generally

#### 4. REQUIREMENTS

##### Design and Construction

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

##### Material

Terminal Parts (Underplating : 50 $\mu$ " min. Nickel overall)

RJ Terminal : Phosphor Bronze, Thickness=0.30mm

Contact Area: 6u" Min.Gold

Input Terminal : Brass, Thickness=0.35mm

Finish : 100 $\mu$ " min. Matte Tin

Cap. Terminal :Phosphor Bronze, Thickness=0.35mm

Finish : 100 $\mu$ " min. Matte Tin

Plastic Parts <UL94V-0>

Housing : PA6T, Black

Insert: PBT, Black

Shield Parts : Stainless steel , Thickness=0.20mm, Pre-soldering

## 5. Operating and Storage Temperature

Operating Temperature : 0°C to +70°C

Storage Temperature : -40°C to +85°C

## 6. RJ45 specifications

Insulation Resistance : 500MΩ min.

Insertion force with the latch depressed : 20N max.

Removal force with the latch depressed : 20N max.

Locking Force of Plug Latch : 50N min. @ 60+/-5 sec.

Durability : 2500 cycles

## 7. 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.

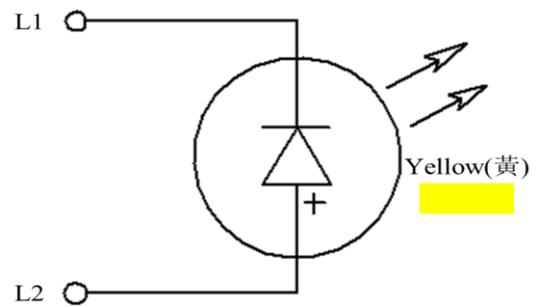
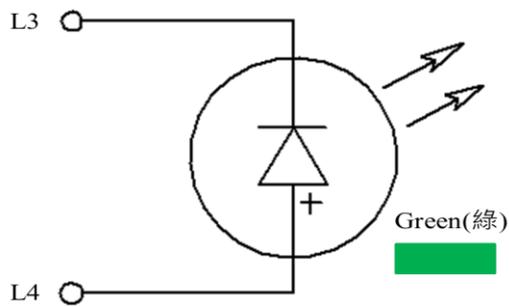
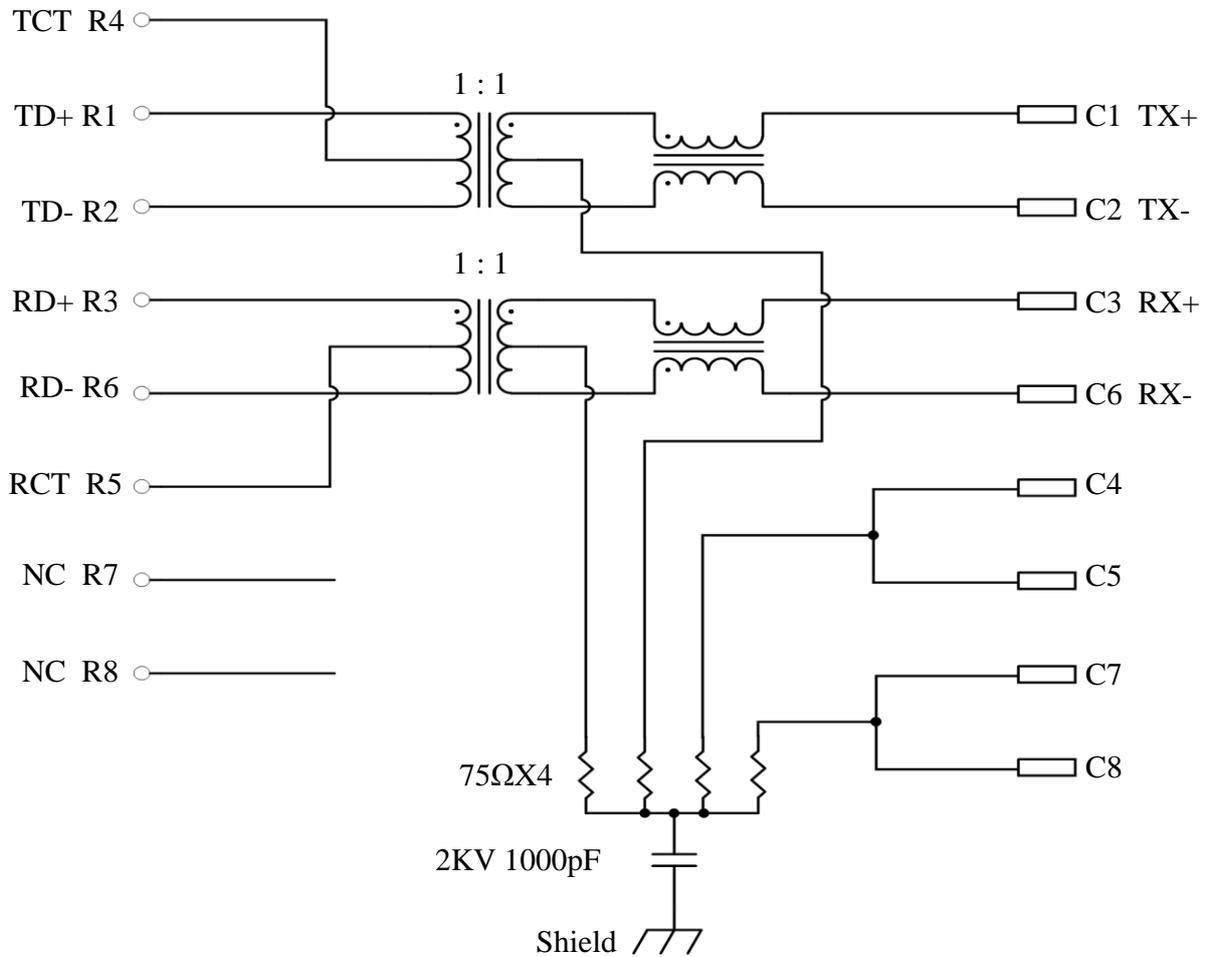
## 8. Packaging and Packing

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

9. ELECTRICAL CHARACTERISTICS @25°C

PHY Side  
(Input)

Cable Side  
(RJ45 Output)



| Emitting Color | $\lambda_p$ (nm) | $V_f$ @ $I_f=20mA$ | $I_r$ @ $V_r=5V$ |
|----------------|------------------|--------------------|------------------|
| Green          | 570              | 1.7 ~2.6 V         | 10 $\mu$ A max.  |
| Yellow         | 588              | 1.7 ~2.6 V         | 10 $\mu$ A max.  |

## Transmitter filter &amp; Receiver filter

Type : Balance low pass 100Ω impedance

Insertion loss : 1 MHz -1.0dB max.

100 MHz -1.4dB max.

Return loss : 1~30MHz -16dB min. load 100Ω

30~60MHz -14dB min. load 100Ω

60~80MHz -10dB min. load 100Ω

## Common Mode Rejection

@1~100 MHz -30dB min.

## Cross Talk

@ 1~100MHz -30dB min.

Inductance @ 100KHz, 0.1V

Input(TD+,TD-); (RD+,RD-) : 350 μH Typ.

## HiPot Test

PHY Side(input) To Cable Side(output) : 1500Vac 60s or 2250Vdc 60s

### 10. WAVE SOLDERING TEMPERATURE PROFILE

Note :

The measuring point for the specified temperature shall be on the soldered part of the lead.

