

# APPROVAL SHEET

To :

Customer P/N :

UDE P/N : S21-ZZ-0023

Description : RJ45 1X1 Tab Up

Through Hole

2.5G Base-T

Contact Area : Gold Flash

LED : L-Green; R-Yellow



Spec No.  
S2118059-00

Update Date  
2018/10/25

Revision  
A

Approved	Checked	Prepared



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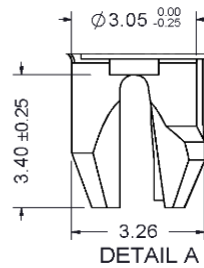
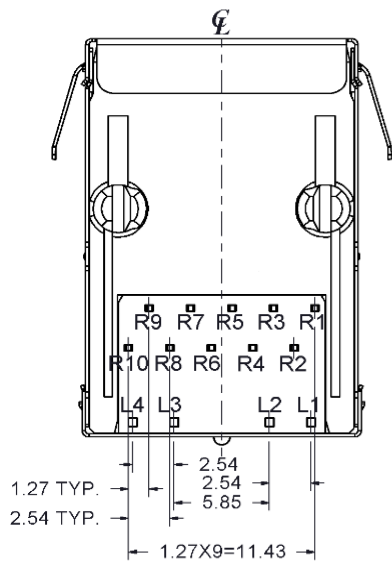
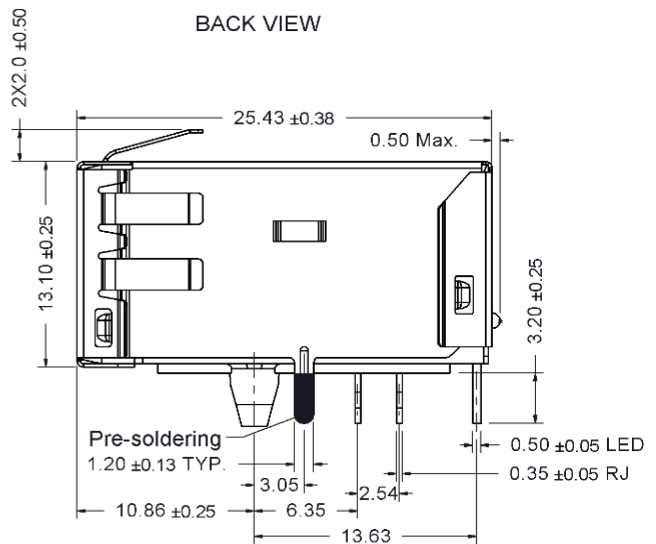
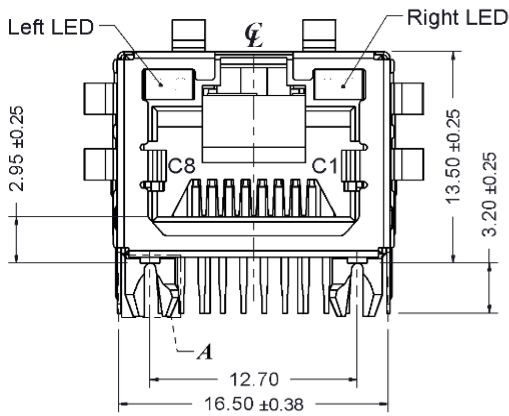
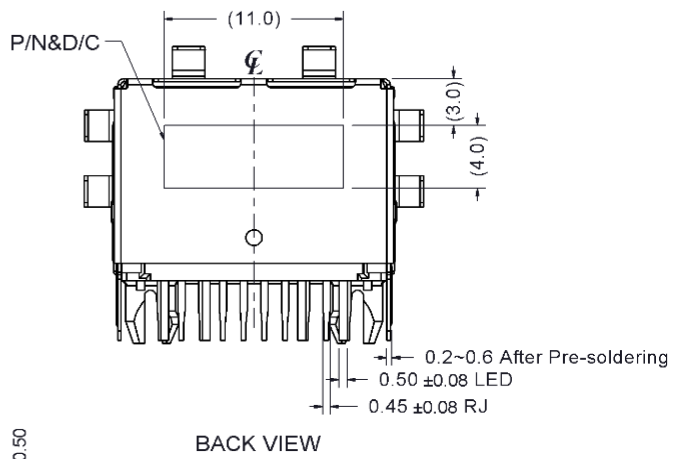
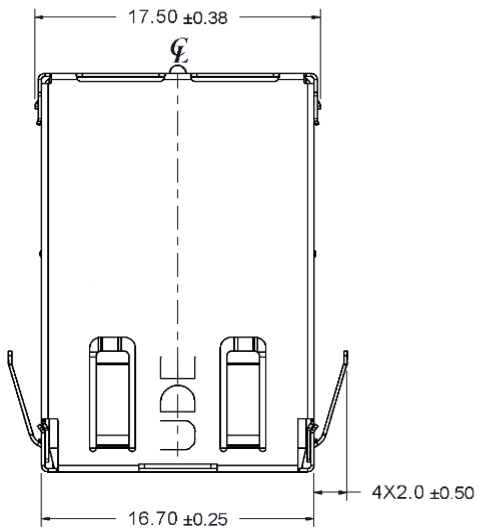
Revision History

Issue Date	Revision	Comments	Operator
2018/10/25	A	Initial Release .	Rain

1. MECHANICAL DIMENSION

Product Dimension

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



Recommended PCB Layout. Component side of board

All dimension units are "mm".

All dimension tolerances are ±0.05mm unless otherwise specified.

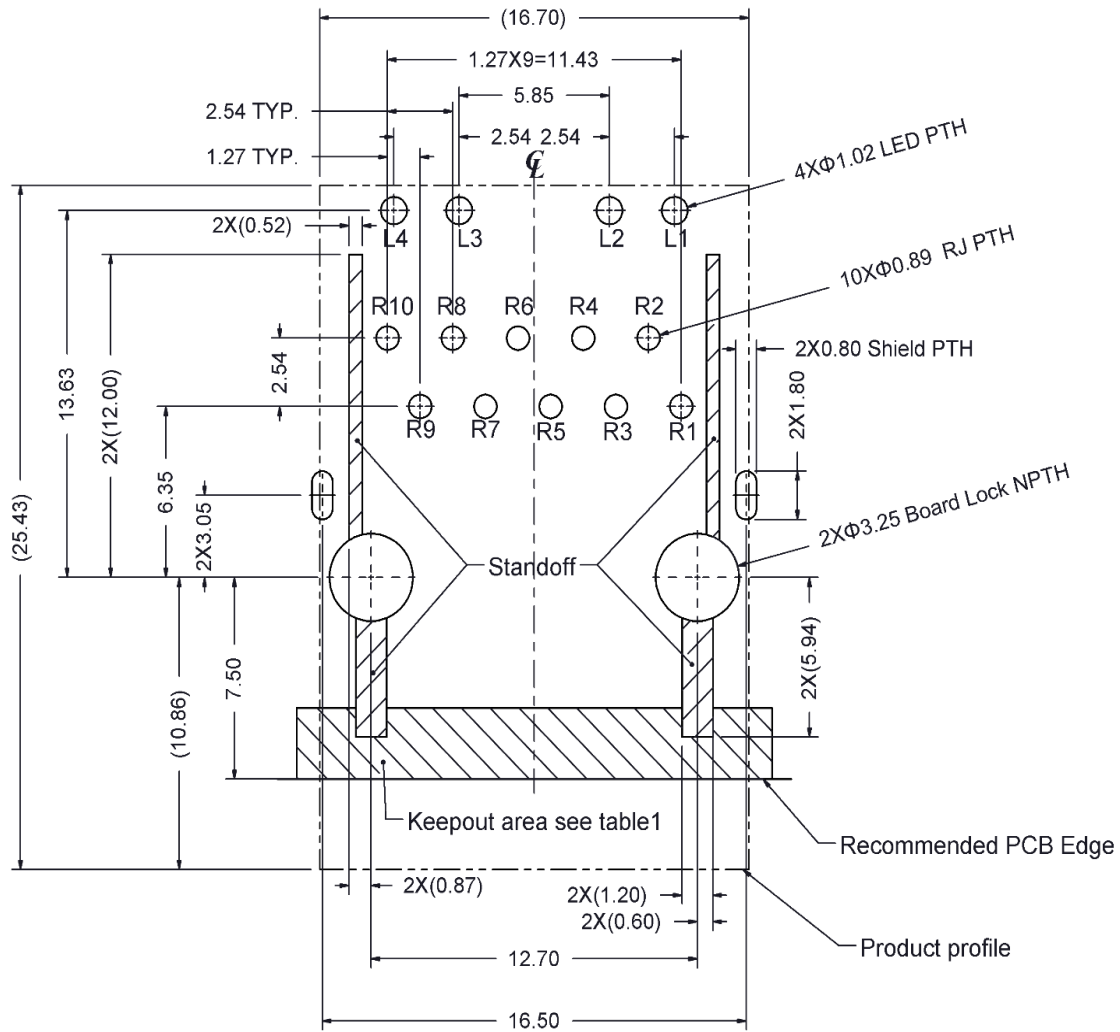
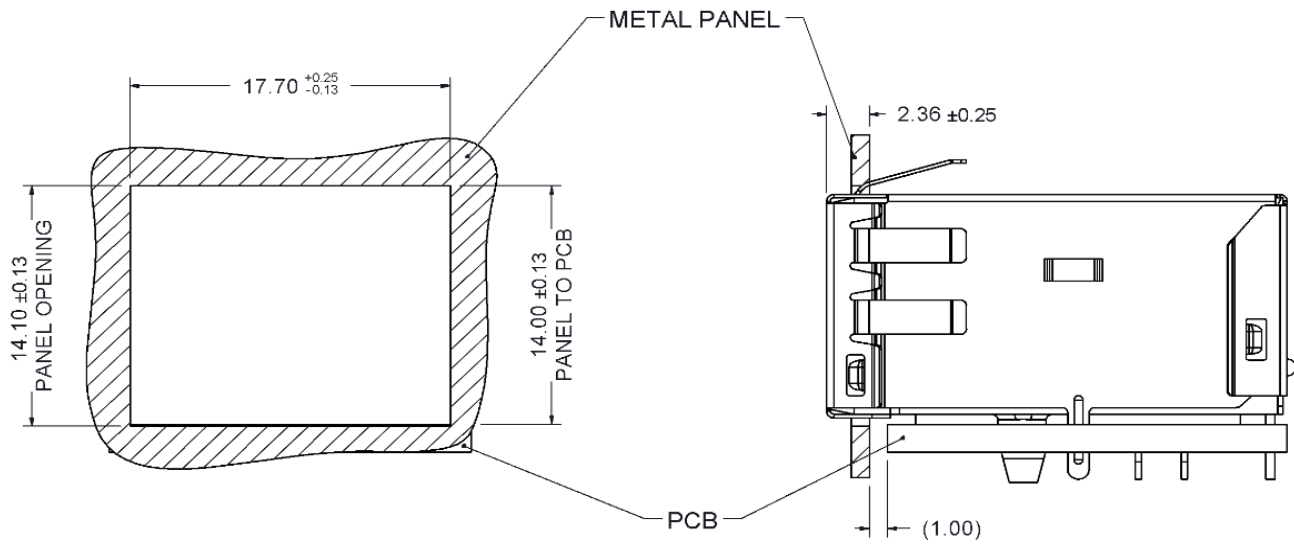


Table1

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



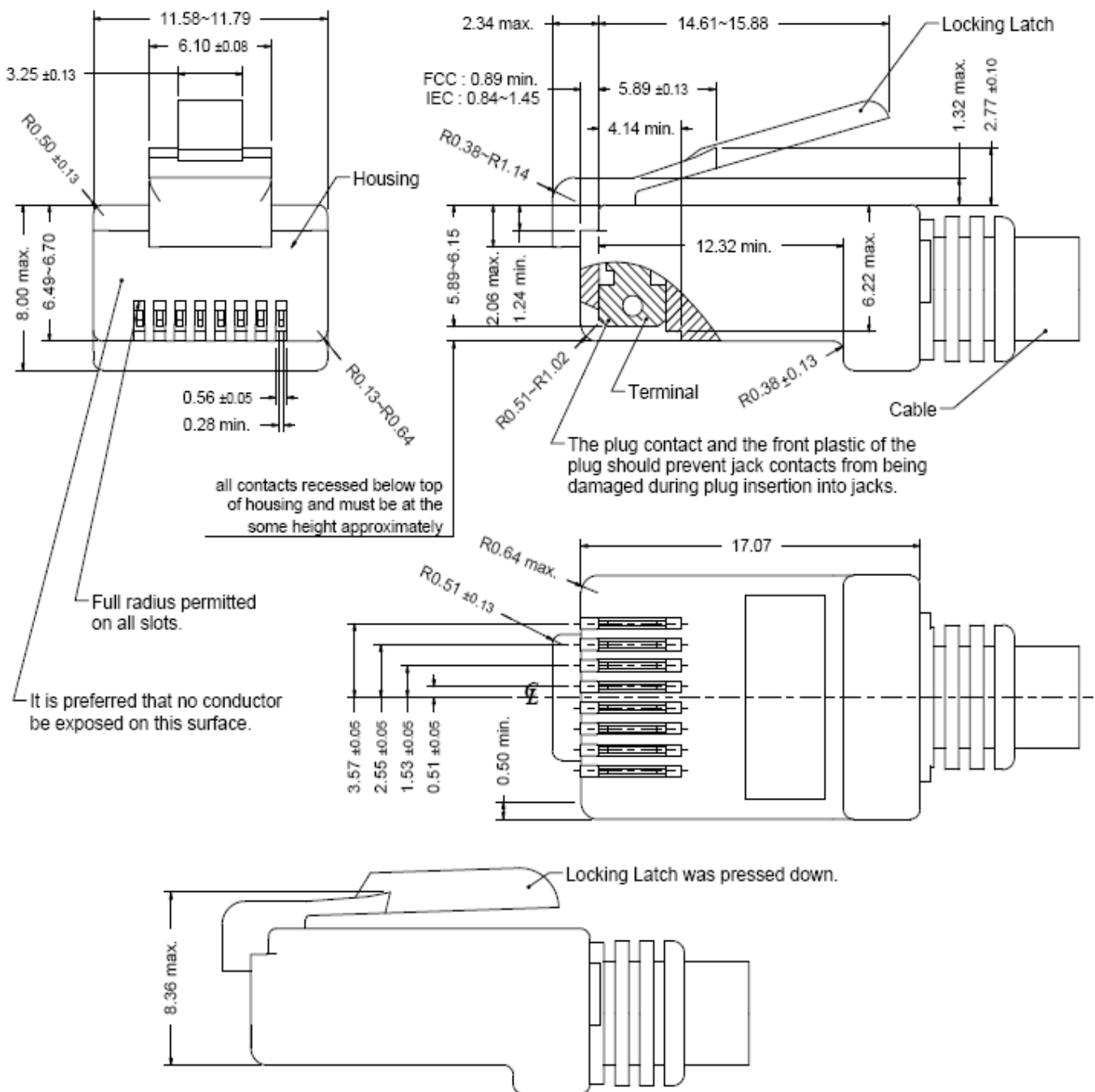
## 2. Packing Information

60 pcs finished goods per tray

7trays(420 pcs finished goods) per inner box

4 Inner boxes(1680 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

Finish : Contact Area : Gold Flash

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

Case : PA6T, Black

Cover : PA6T, Black

Spacer : PA6T, 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 : 750 cycles

## 7. Performance and Test Description

Product is designed to meet electrical, mechanical and environmental performance requirements specified in below table.

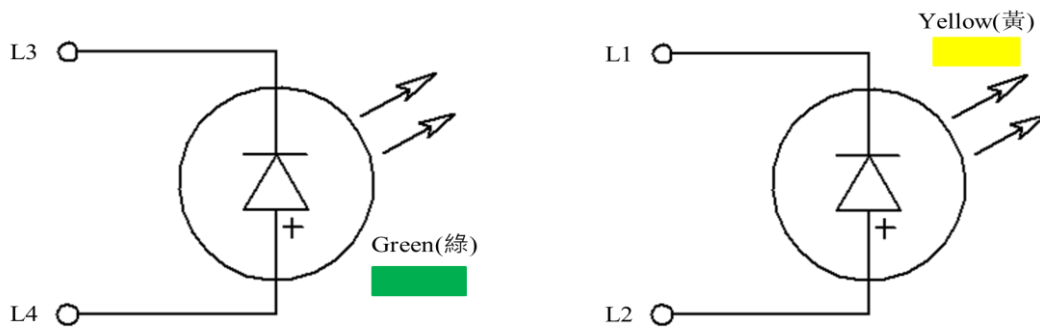
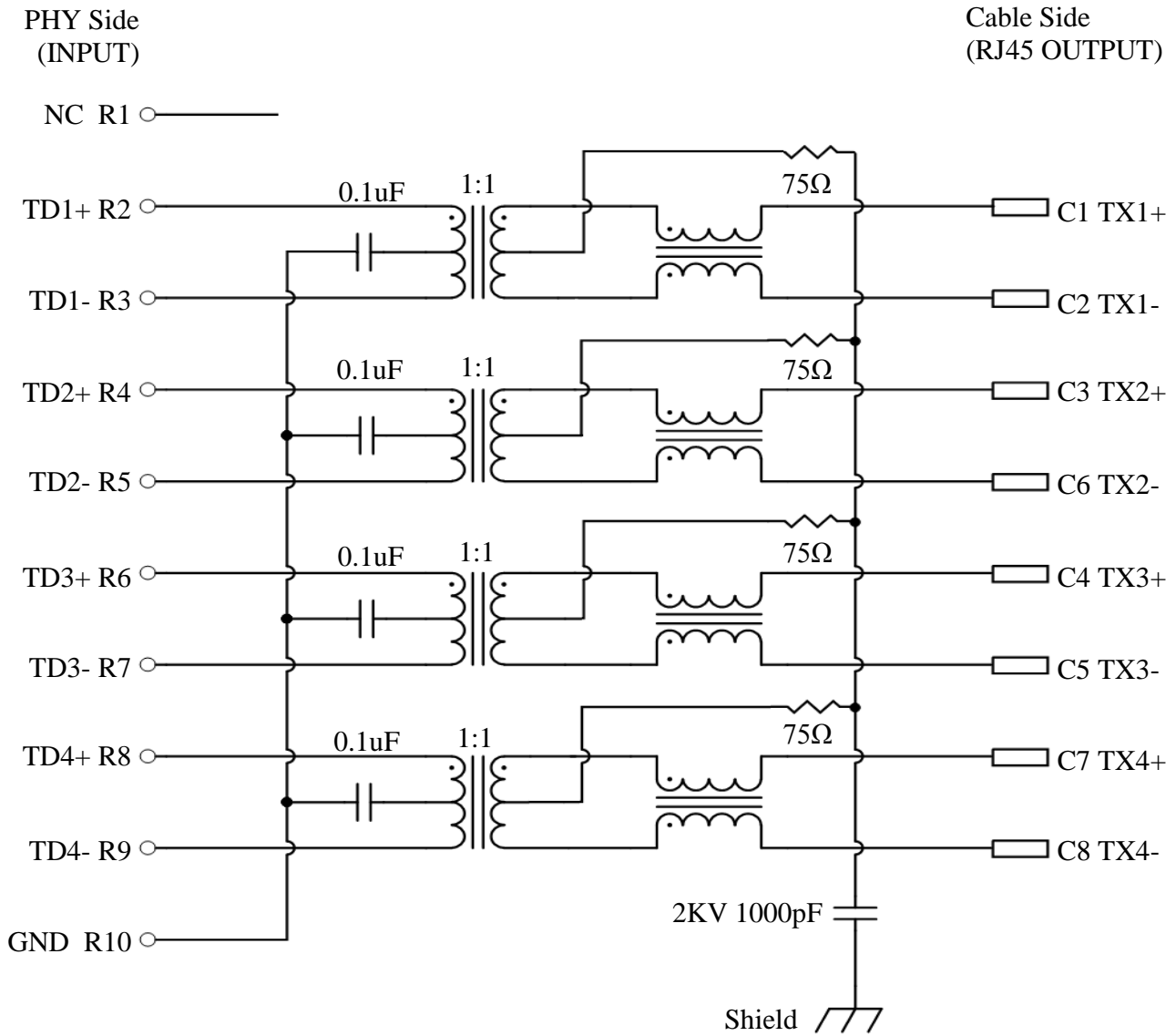
All tests are performed at ambient environmental conditions per MIL-STD-1344A and EIA-364 unless otherwise specified.

## 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



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 & Receiver filter

Type : Balance low pass 100Ω impedance

Insertion loss : 1~50MHz -0.5dB max.

50~125MHz -1.0dB max.

125~200MHz -2.0dB max.

Return loss : 1~40MHz -20dB min.

40~200MHz  $-20+15*\log(\text{Freq MHz}/40\text{MHz})$  dB min.

### Reflected CM to Diff Conversion(REF)

1MHz -30dB min.

50MHz -30dB min.

100MHz -27dB min.

200MHz -24dB min.

### CM to DM Conversion(REF)

1-50MHZ -35 dB min

125MHZ -30 dB min

200MHZ -25 dB min

### Reflected Diff to CM Conversion(REF)

1-10MHZ -48 dB min

10-200MHZ  $-48+19*\log(\text{Freq MHz}/10\text{MHz})$  dB min

### CM to CM Attenuation (REF)

1-200MHZ -25 dB min

### Cross Talk

1~40MHz -35dB min.

40~125MHz  $-35+15\log((\text{Freq MHz}/40\text{MHz}))$  dB min.

Inductance (OCL) @ 100KHz, 0.1V, 8mA DC BIAS

Input(TD1+,TD1-) ; (TD2+,TD2-) ; (TD3+,TD3-) ; (TD4+,TD4-) : 180 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.

