

# APPROVAL SHEET

To :

Customer P/N :

UDE P/N : GSG-ZZ-0003

Description : RJ45 1X2 Tab Up

T/H, Slim, Sink

10G Base-T

Contact Area : 15 $\mu$ " Min. Gold

LED : L-Green; R-Orange/Green



Spec No.  
GSG18005-00

Update Date  
2018/12/4

Revision  
A

Approved	Checked	Prepared



湧德電子 股份有限公司  
UDE Corp.

桃園市(33852) 蘆竹區內溪路 68 巷13號

No.13, Ln. 68, Neixi Rd., Luzhu Dist., Taoyuan City (33852), Taiwan

TEL: 886-3-3242000 FAX: 886-3-3246611

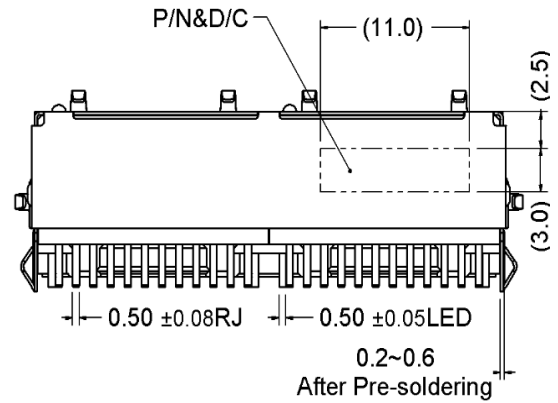
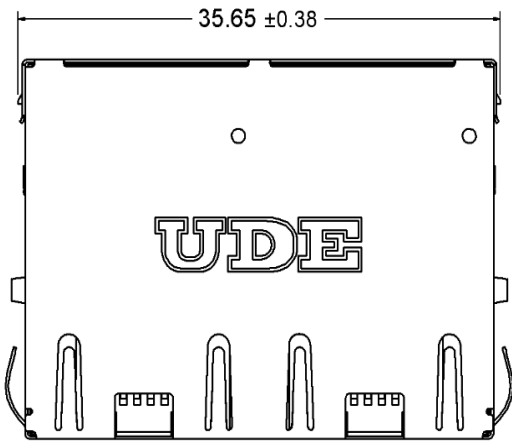
<http://www.ude-corp.com/>



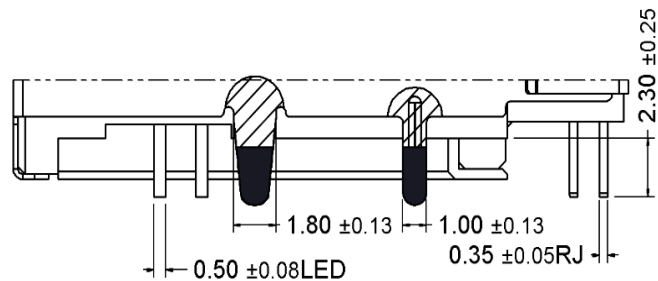
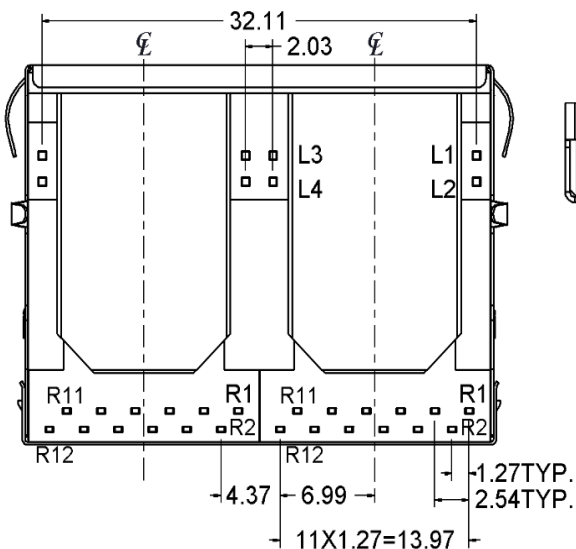
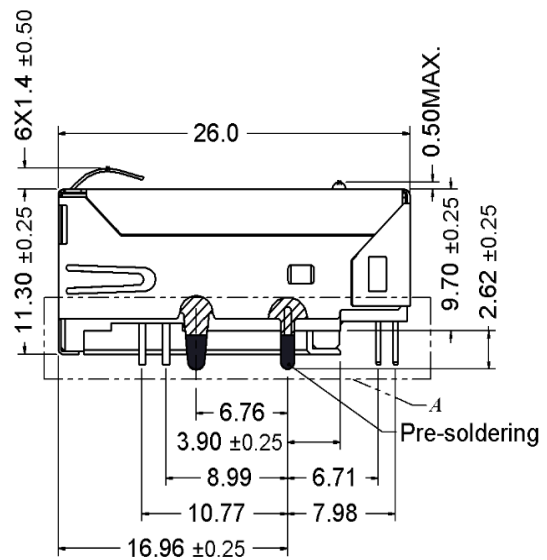
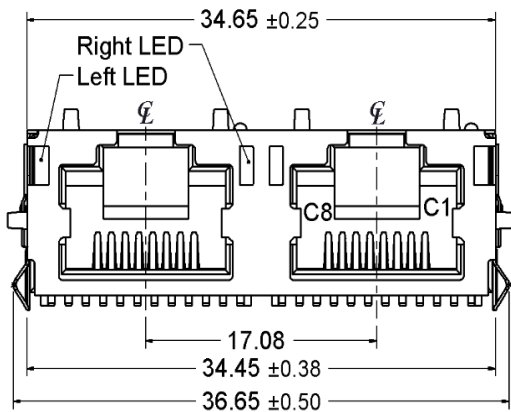
1. MECHANICAL DIMENSION

Product Dimension

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



BACK VIEW

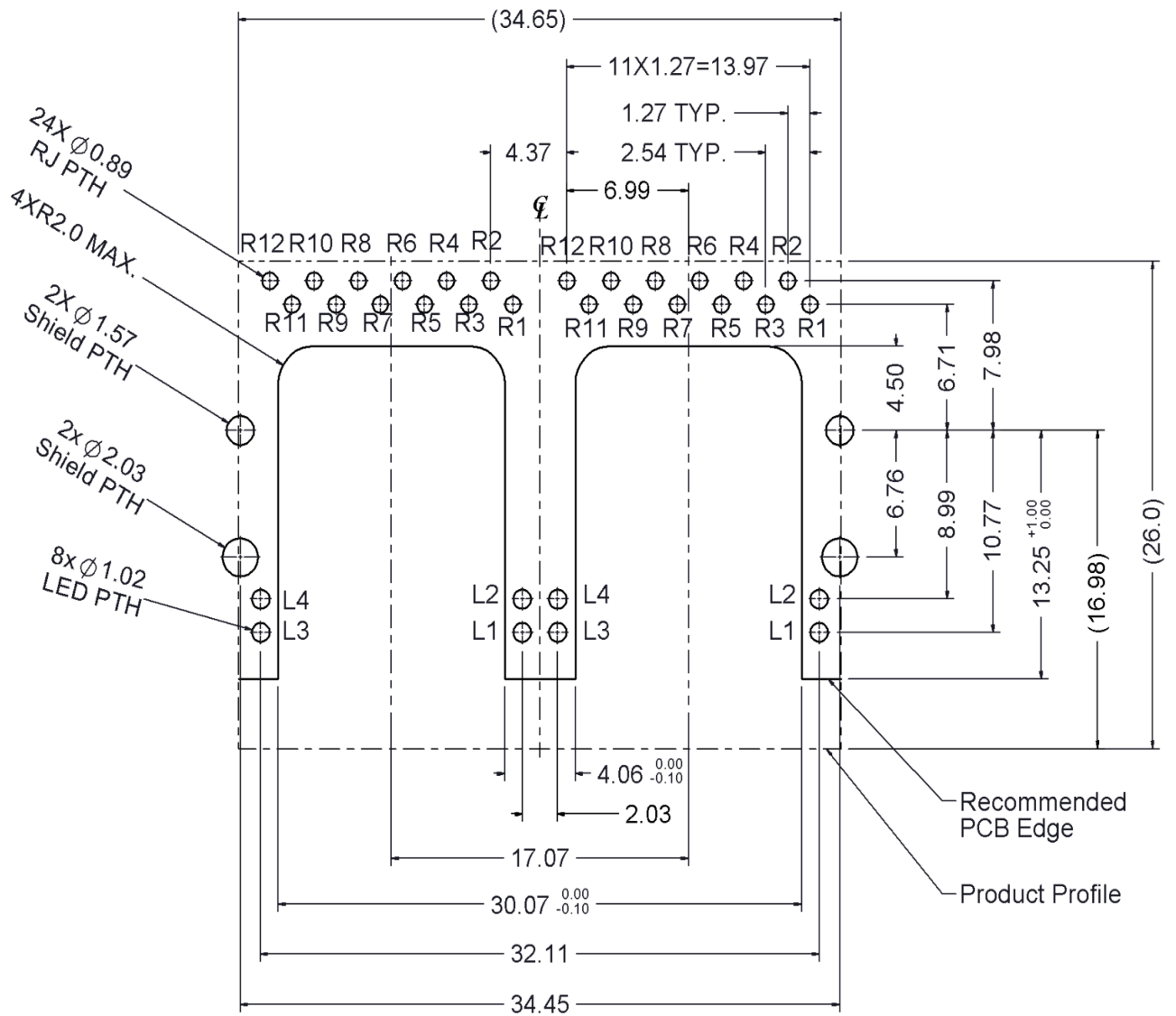


Detail A

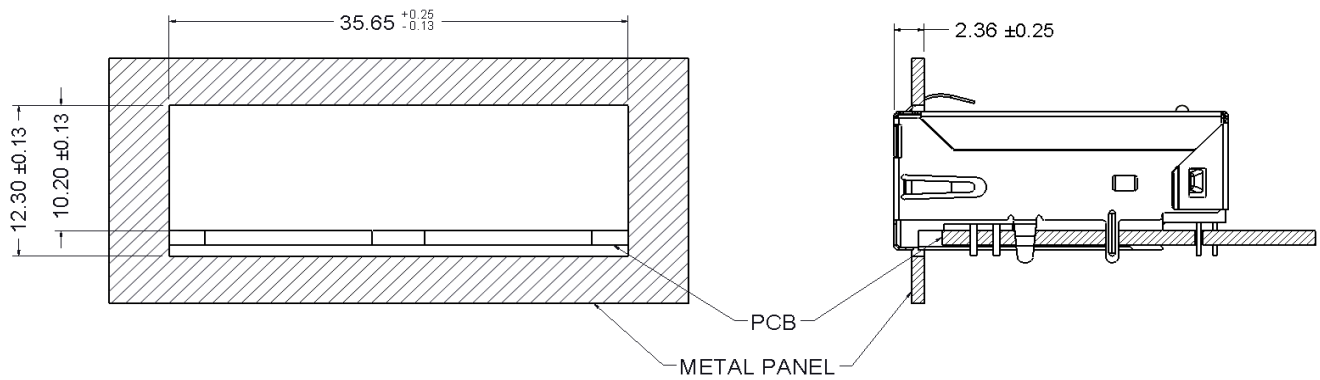
Recommended PCB Layout. Component side of board

All dimension units are "mm".

All dimension tolerances are  $\pm 0.05\text{mm}$  unless otherwise specified.



## Recommended Panel cutout



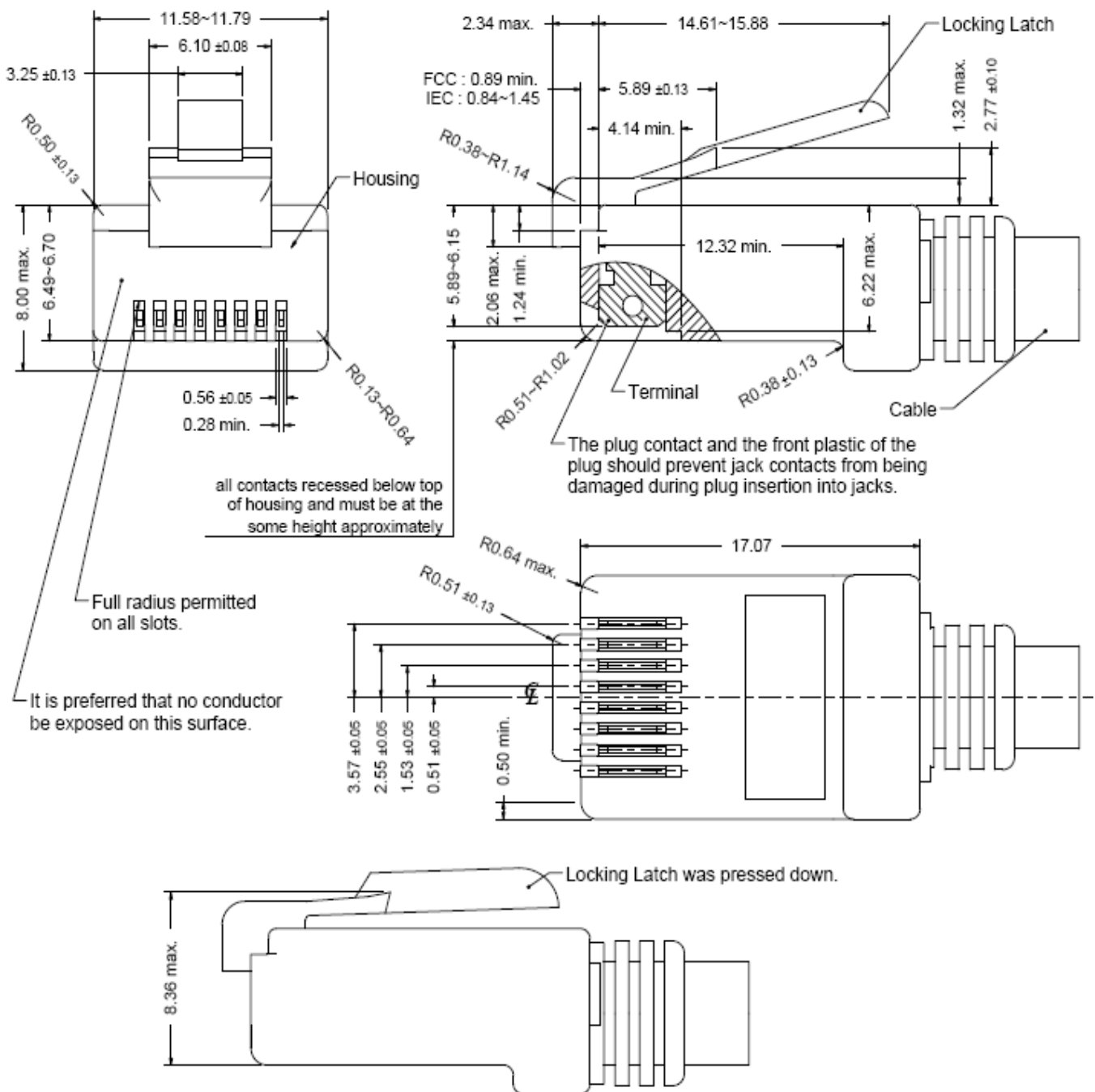
## 2. Packing Information

35pcs finished goods per tray

7trays(245 pcs finished goods) per inner box

4Inner boxes(980 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 : 15 $\mu$ " min. Gold

Input Terminal : Brass, Thickness=0.35mm

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

Case Terminal : Brass, Thickness=0.25mm

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

Plastic Parts <UL94V-0>

Housing : LCP, Black

Case : 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 : 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

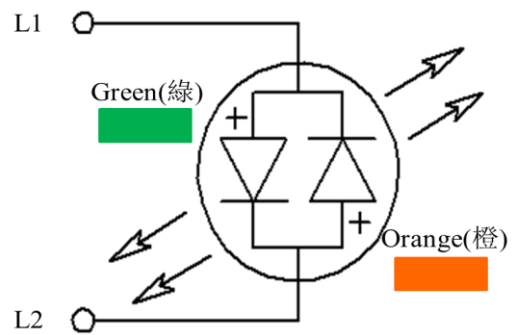
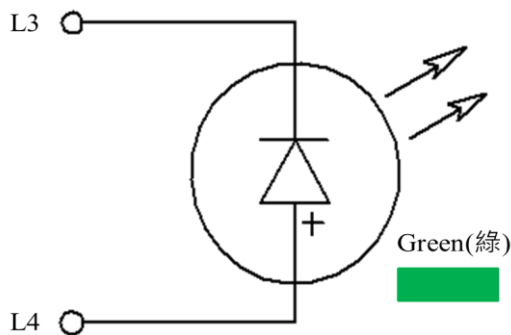
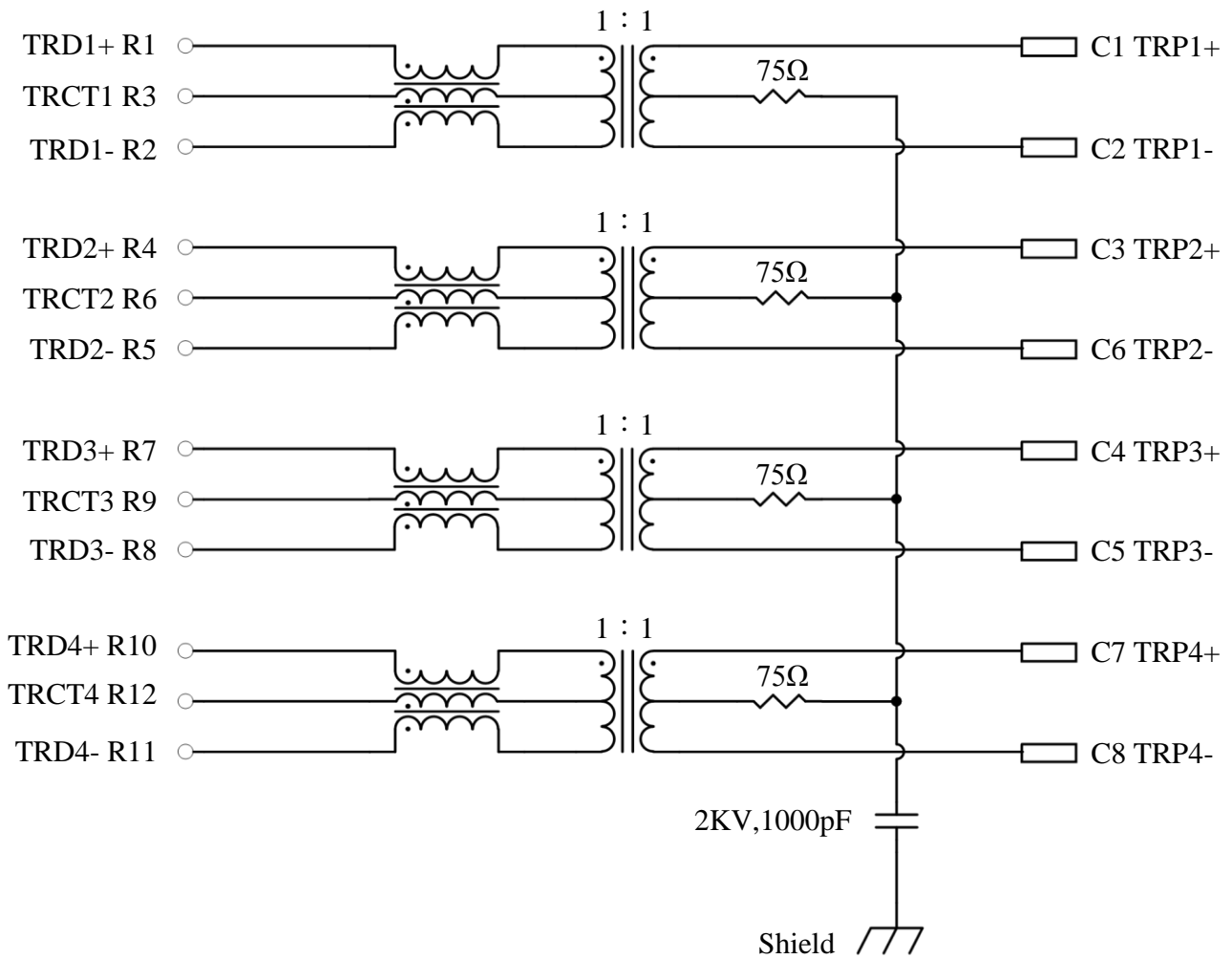
All parts shall be packaged and packed to protect against physical damage, corrosion and deterioration during shipment and storage.



9. ELECTRICAL CHARACTERISTICS @25°C

PHY Side  
(Input)

Cable Side  
(RJ45 Output)



Emitting Color	$\lambda_p$ (nm)	$V_f$ @ $I_f=20\text{mA}$	$I_r$ @ $V_r=5\text{V}$
Green	570	1.7 ~2.6 V	10 $\mu\text{A}$ max.
Orange	605	1.7 ~2.6 V	10 $\mu\text{A}$ max.

## Transmitter filter &amp; Receiver filter

Type : Balance low pass 100Ω impedance

Insertion loss : 1~400MHz -2.0dB(-1.4TYP) max.

Return loss :	1MHz	-20dB Min.	load 100Ω
	100MHz	-20dB Min.	load 100Ω
	200MHz	-18dB Min.	load 100Ω
	300MHz	-15dB Min.	load 100Ω
	400MHz	-10dB Min.	load 100Ω
	500MHz	-8dB Min.	load 100Ω

## Reflected CM to Diff Conversion(REF)

50MHz	-30dB Min.
100MHz	-27dB Min.
200MHz	-24dB Min.
300MHz	-22dB Min.
400MHz	-21dB Min.
500MHz	-20dB Min.

## Reflected Diff to CM Conversion(REF)

1MHz	-48dB Min.
100MHz	-35dB Min.
400MHz	-24dB Min.
500MHz	-24dB Min.

## CM to Diff Conversion (REF)

50MHz	-48dB Min.
100MHz	-42dB Min.
200MHz	-36dB Min.
300MHz	-33dB Min.
400MHz	-30dB Min.
500MHz	-28dB Min.

## CM to CM Attenuation (REF)

1MHz	-22dB Min.
500MHz	-20dB Min.
800MHz	-20dB Min.
1000MHz	-17dB Min.

## Cross Talk (REF)

1MHz	-34dB Min.
350MHz	-23dB Min.
500MHz	-23dB Min.

## Inductance (OCL) @ 25°C, 100KHz, 100mV, 8mA DC BIAS

Input(TRD1+, TRD1-); (TRD2+, TRD2-); (TRD3+, TRD3-); (TRD4+, TRD4-):160uH Min.

## 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.

