

APPROVAL SHEET

To :

Customer P/N :

UDE P/N : S54-TD-0001

Description : RJ45 1X1 Tab Up

T/H, Slim, Sink

10/100/1000 Base-T

Contact Area : 30 μ " Min. Gold

LED : L-Green/Yellow; R-Green

Packing With Tape Reel



Halogen
Free

Spec No.
S5421003-00

Update Date
2021/3/9

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

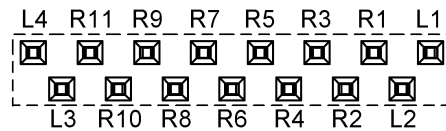
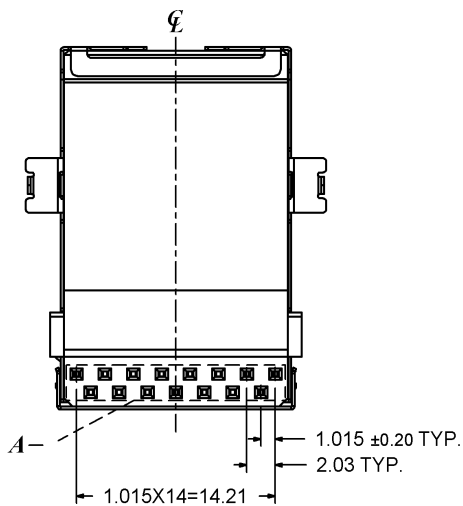
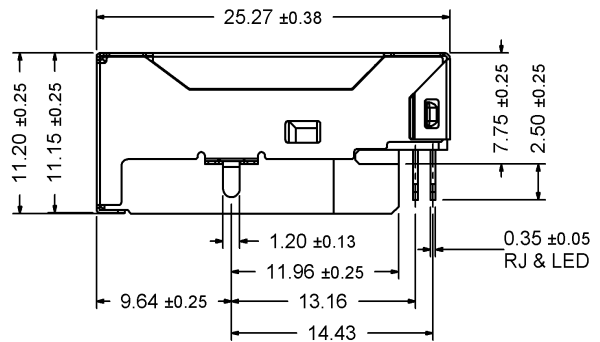
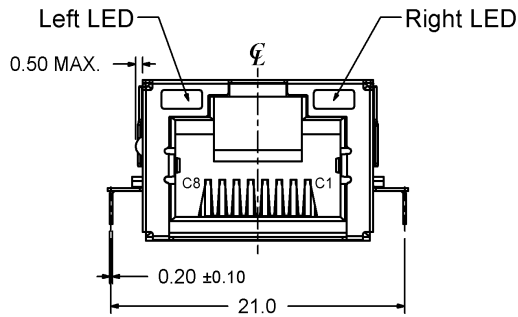
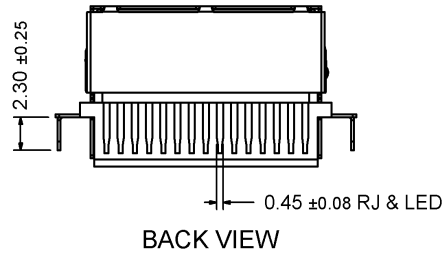
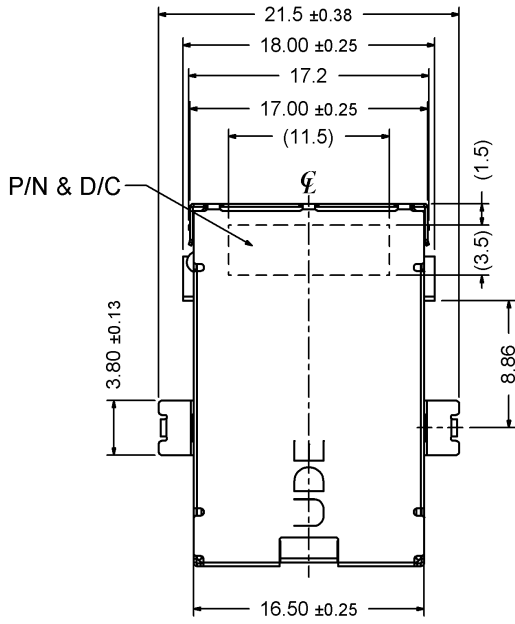
TEL: 886-3-3242000 FAX: 886-3-3246611

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

1. MECHANICAL DIMENSION

Product Dimension

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

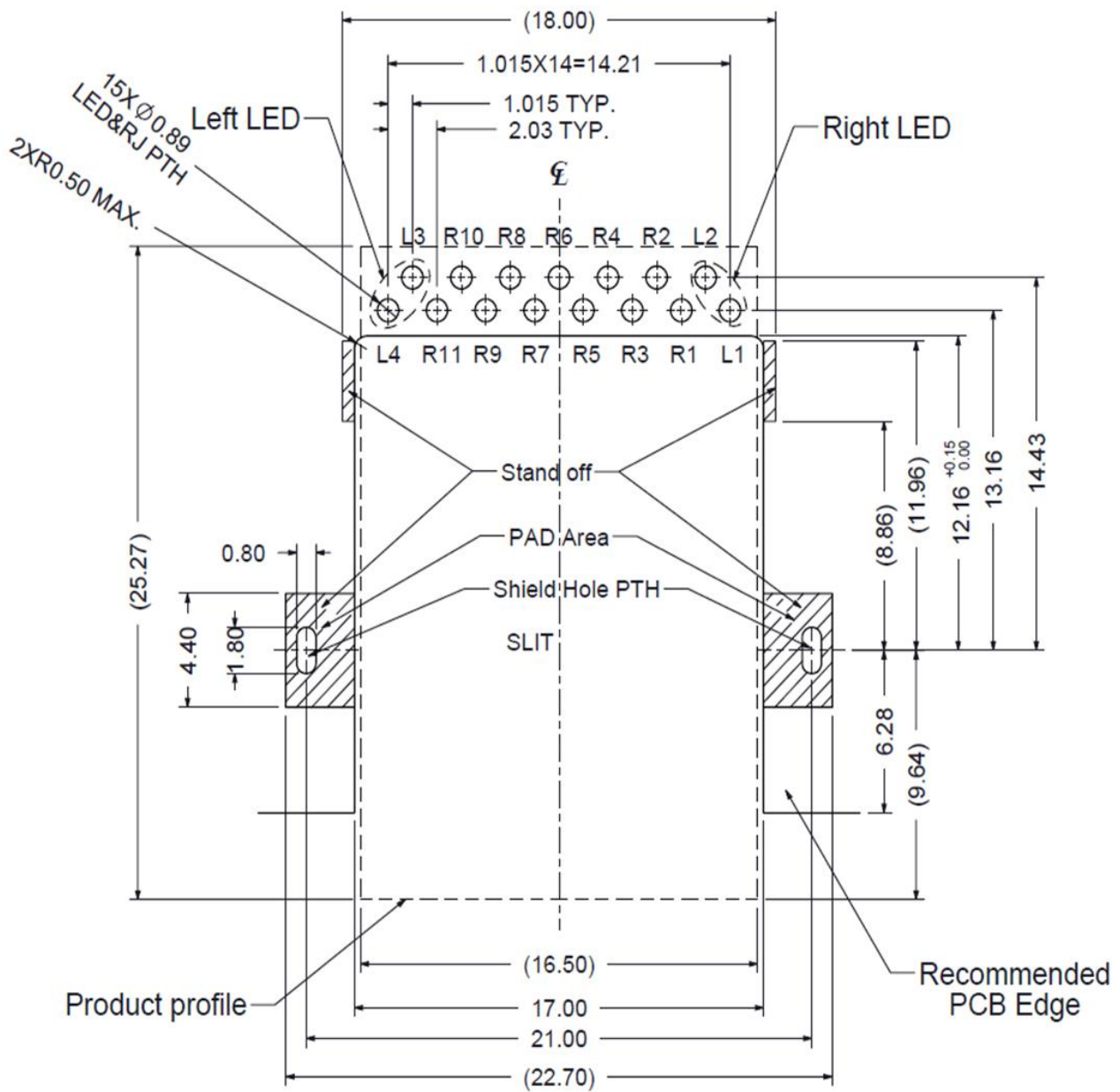


DETAIL A
SCALE 4 : 1

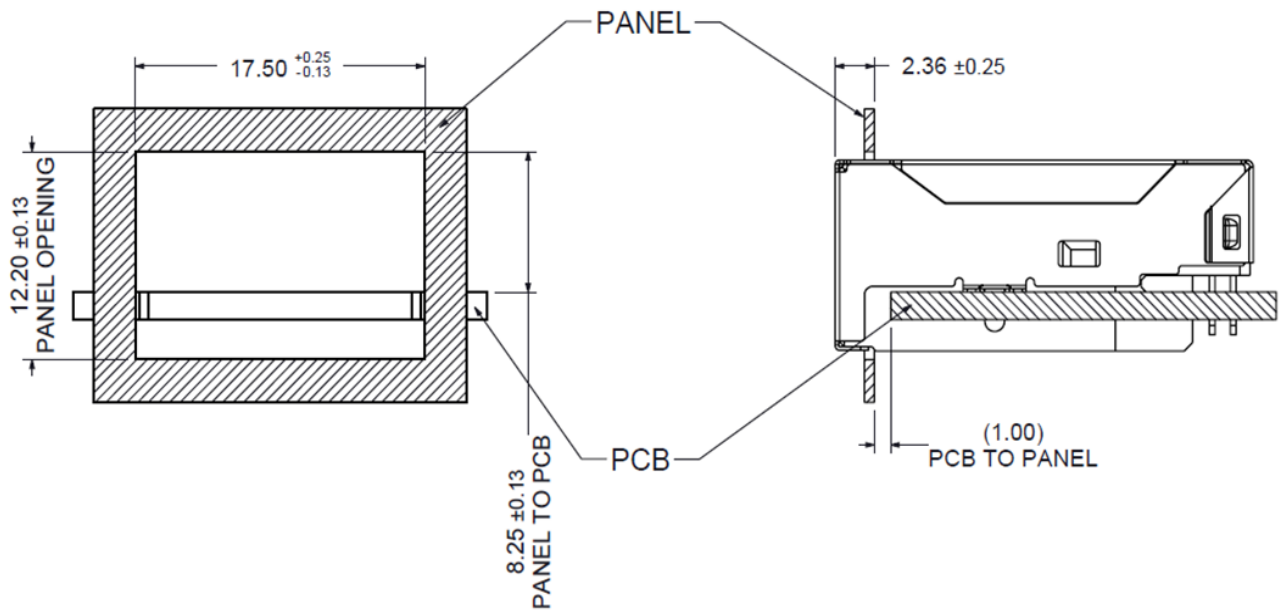
Recommended PCB Layout. Component side of board

All dimension units are "mm".

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



Recommended Panel cutout

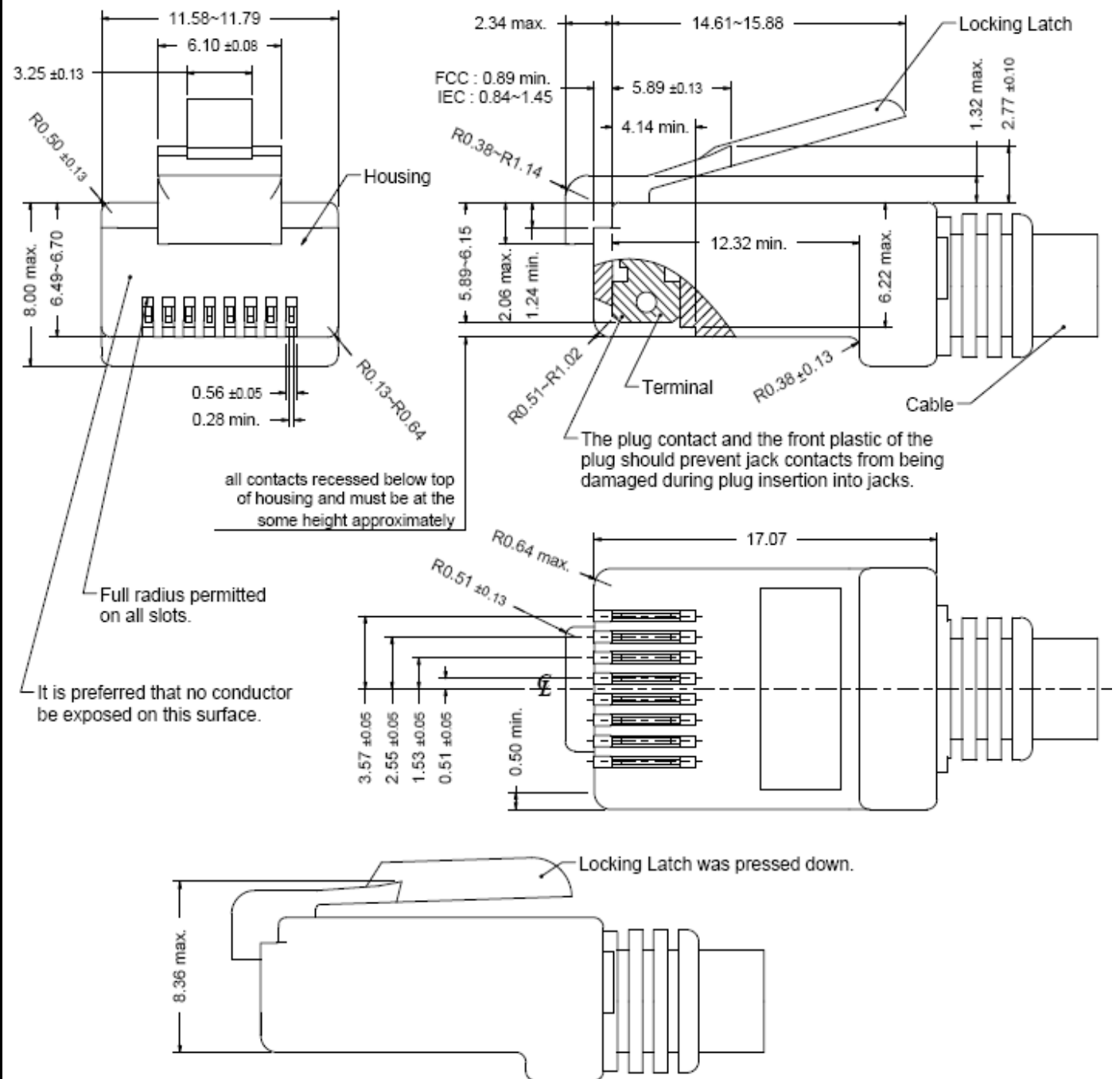


2. Packing Information

120 pcs finished goods per reel

6 reels (720 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 μ " min. Nickel overall)

RJ Terminal : Phosphor Bronze, Thickness=0.30mm

Finish : Contact Area : 30 μ " min. Gold

Input Terminal : Brass, Thickness=0.35mm

Finish : 100 μ " min. Matte Tin

Cap. Terminal : Phosphor Bronze, Thickness=0.35mm

Finish : 100 μ " min. Matte Tin

Plastic Parts <UL94V-0>

Housing : PA6T, Black

Case : PA6T, Black

Cover : PA6T, Black

Shield Parts

Shield : Phosphor Bronze, Thickness=0.20mm, 30 μ " min. Nickel overall

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

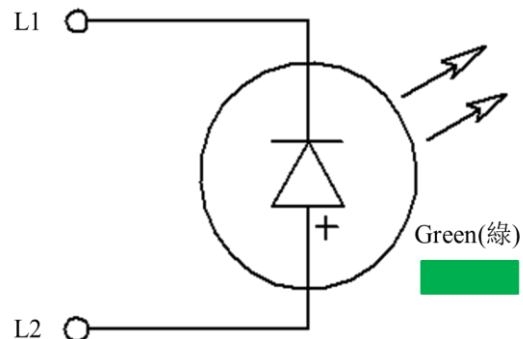
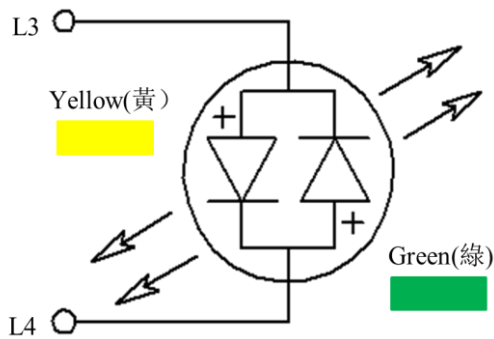
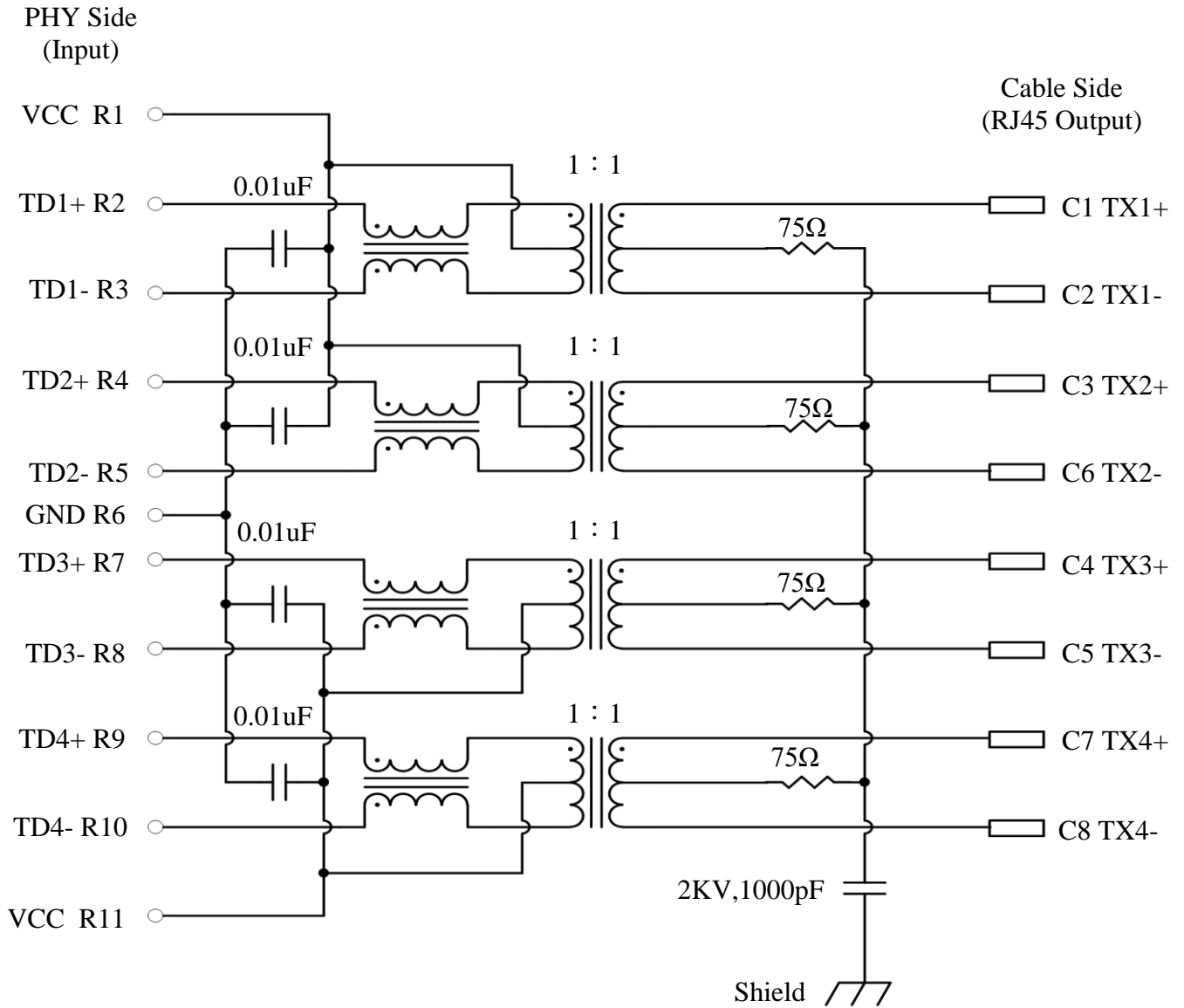
Product is designed to meet electrical, mechanical and environmental performance requirements specified in below table.

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



Emitting Color	λ_p (nm)	V_f @ $I_f=20mA$	I_r @ $V_r=5V$
Green	570	1.7 ~2.6 V	10 μ A max.
Yellow	588	1.7 ~2.6 V	10 μ A max.

Transmitter filter & Receiver filter

Type : Balance low pass 100Ω impedance

Insertion loss : 1 MHz -1.0dB Max.

100 MHz -1.4dB Max.

Return loss : 1~40MHz -16dB Min. load 100Ω

40~60MHz -14dB Min. load 100Ω

60~80MHz -10dB Min. load 100Ω

80~100MHz -8dB Min. load 100Ω

Common Mode Rejection

@1~100 MHz -30dB Min.

Cross Talk

@ 1~100MHz -30dB Min.

Inductance @ 100KHz, 0.1V

Input(TD1+, TD1-); (TD2+, TD2-); (TD3+, TD3-); (TD4+, TD4-) : 350 μH Typ.

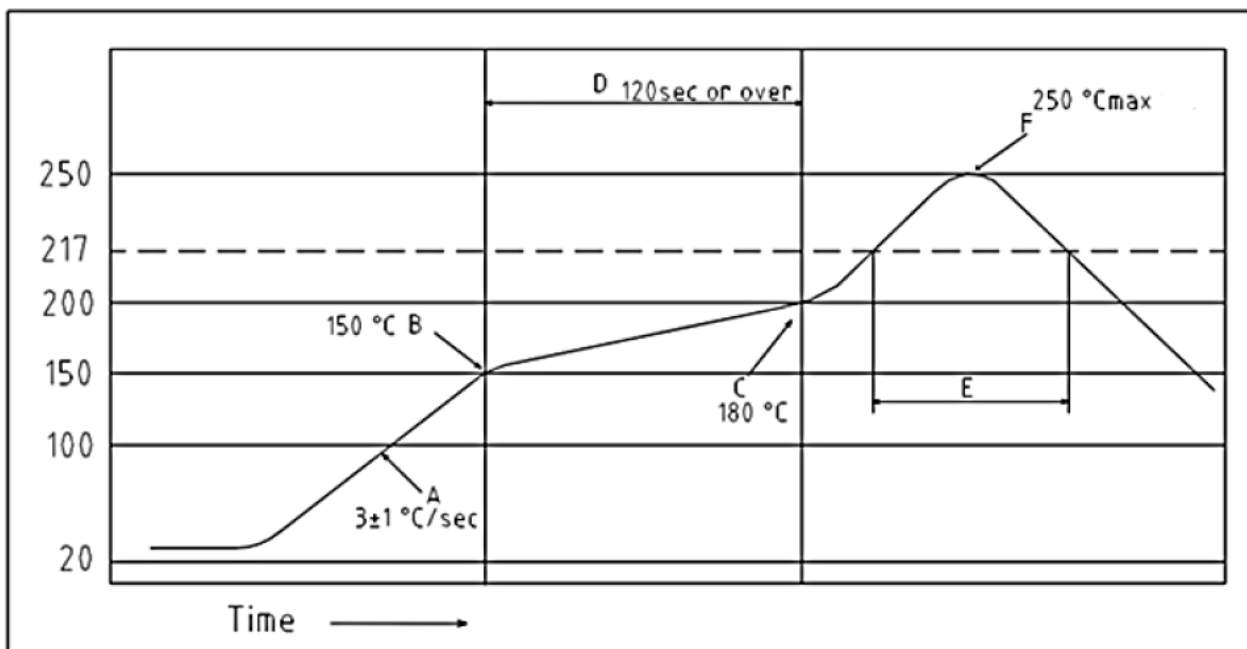
HiPot Test

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

10. IR REFLOW TEMPERATURE PROFILE

Temperature condition of reflow soldering

Contents	Soldering Condition
A : Increasing speed	$3\pm 1^{\circ}\text{C}/\text{sec}$
B : Pre-heat starting Temp	150°C
C : Pre-heat ending Temp	180°C
D : Pre-heat interval	120 sec or over
E : Over 217°C time	60~150 sec
F : Peak Temperature	250°C max. 10sec



Type of lead-free solder should be 96.5Sn-3.0Ag-0.5Cu or 99.3Sn-0.7Cu.