APPROVAL SHEET

To：

Customer P/N：

UDE P/N： RVC-ZZ-0010

Description： RJ45 1X4 Vertical

Through Hole

2.5G Base-T

Contact Area： 30μ" Min. Gold

LED：L-Green; R-Yellow

Packing With Hard Tray

RoHS

Spec No.	Update Date	Revision
RVC20001-00	2020/9/9	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/

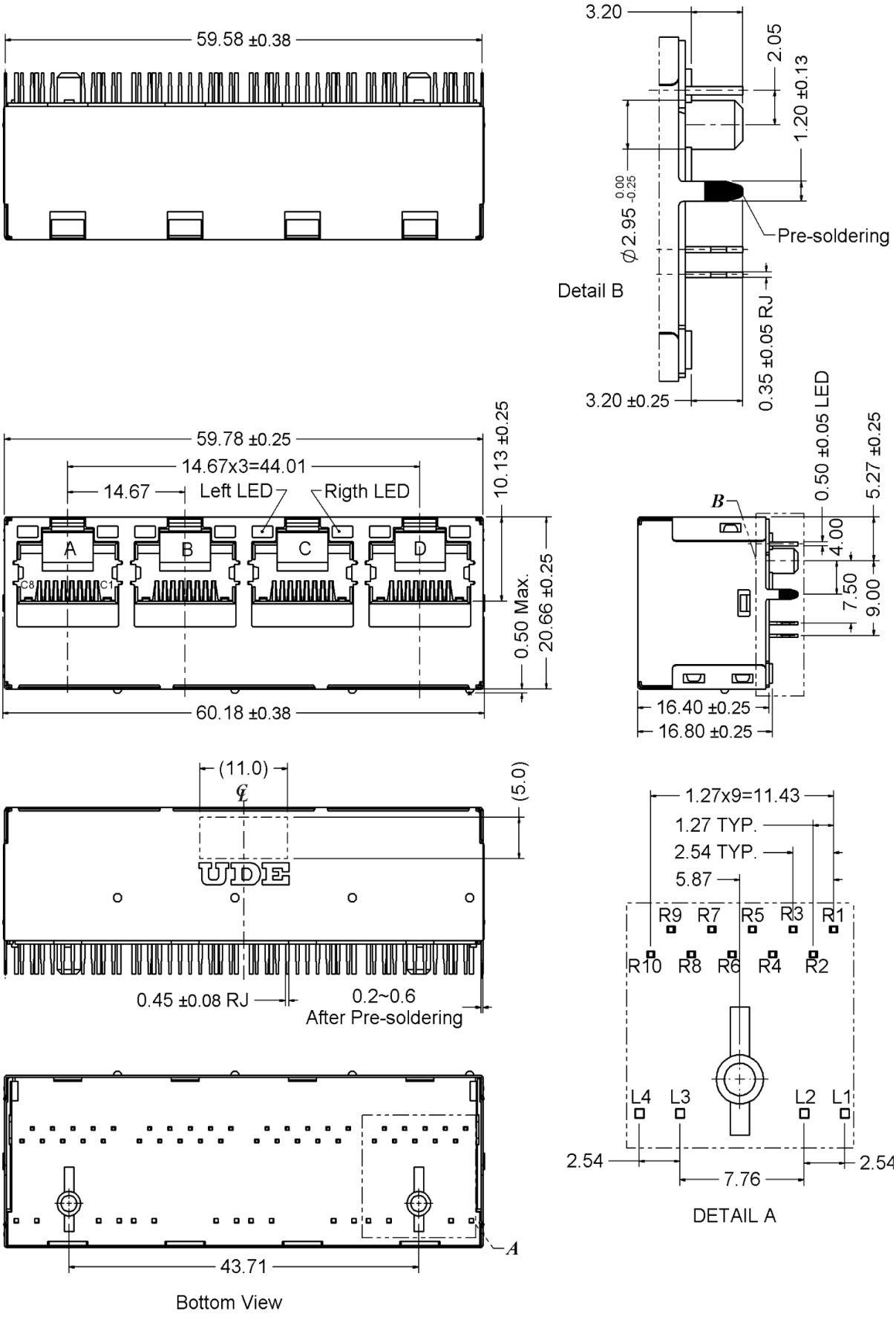
Revision History

Issue Date	Revision	Comments	Operator
2020/9/9	A	Initial Release .	Eagle

1. MECHANICAL DIMENSION

Product Dimension

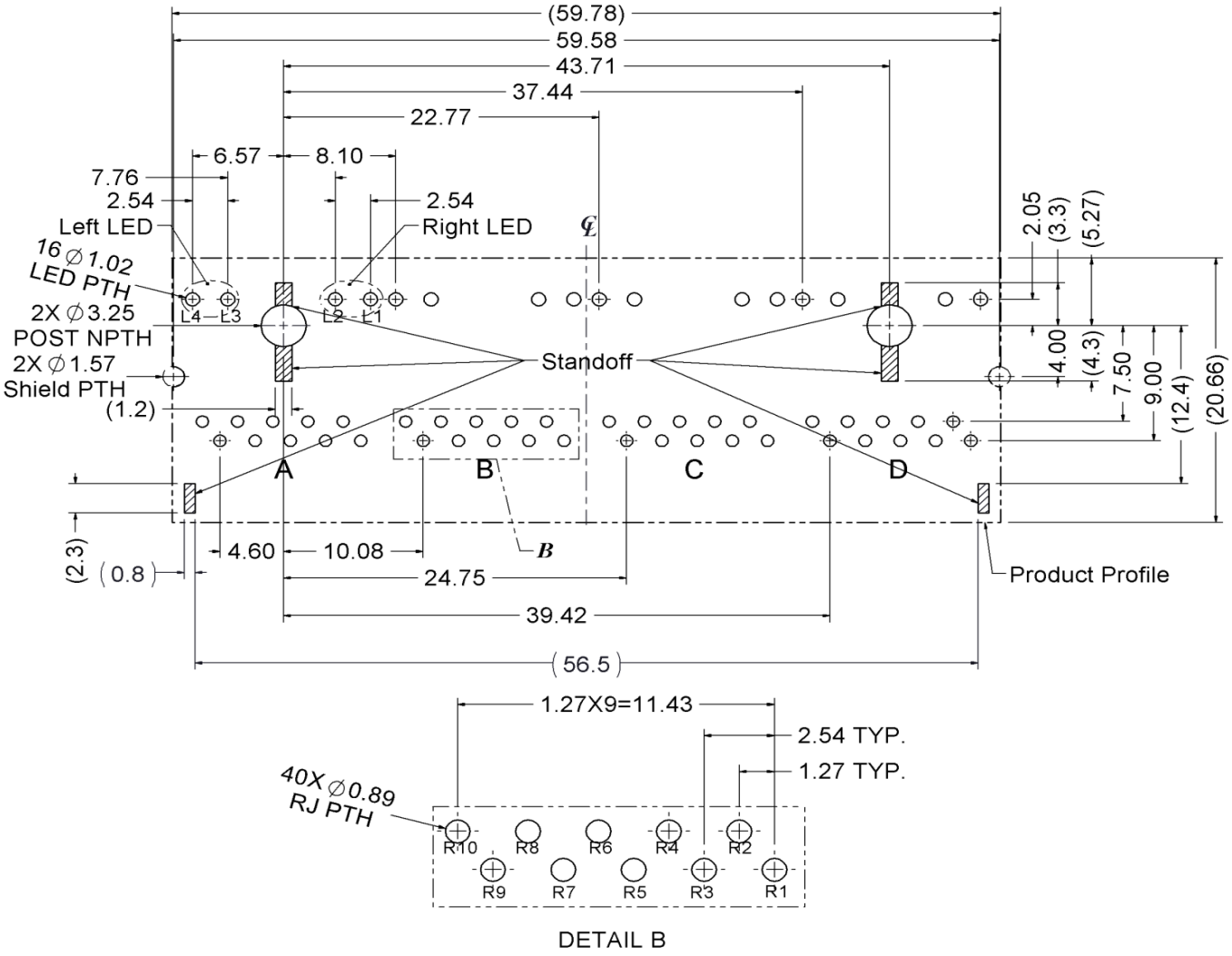
Unit:mm	General Tolerance :	X.X : ± 0.38 X.XX : ± 0.20



Recommended PCB Layout. Component side of board

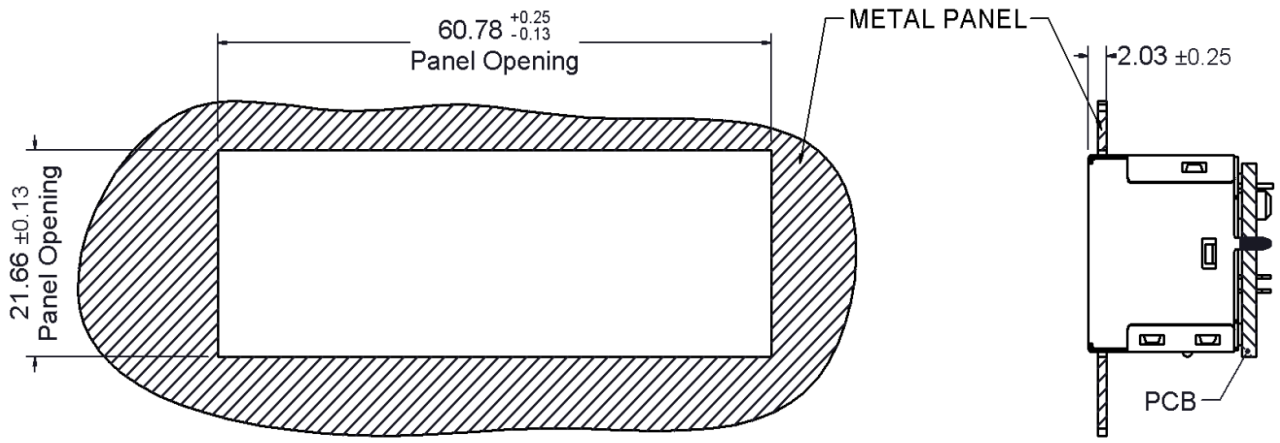
All dimension units are "mm".

All dimension tolerances are ±0.05mm unless otherwise specified.



DETAIL B

Recommended Panel cutout



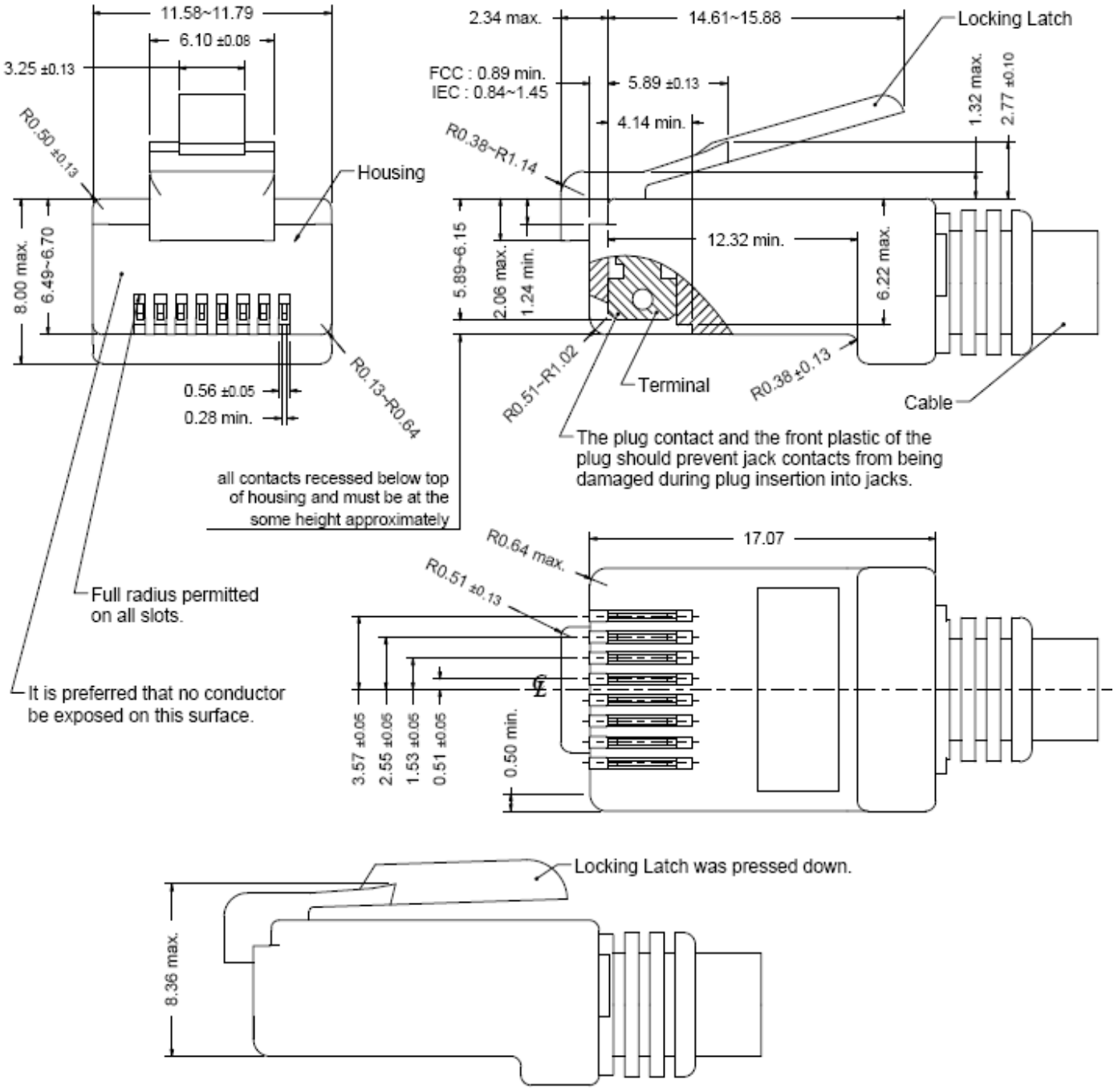
2. Packing Information

24 pcs finished goods per tray

7 trays(144 pcs finished goods) per inner box

4 Inner boxes(576 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 : 50μ" min. Nickel overall)

RJ Terminal : Phosphor Bronze, Thickness=0.35mm

Finish : Contact Area : 30u" Min.Gold

Input Terminal : Brass, Thickness=0.35mm

Finish : 100μ" min. Matte Tin

Case Terminal : Brass, Thickness=0.30mm

Finish : 100μ" min. Matte Tin

Plastic Parts <UL94V-0>

Housing : PA9T, Black

Case : PA9T, Black

Spacer : PA9T, 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

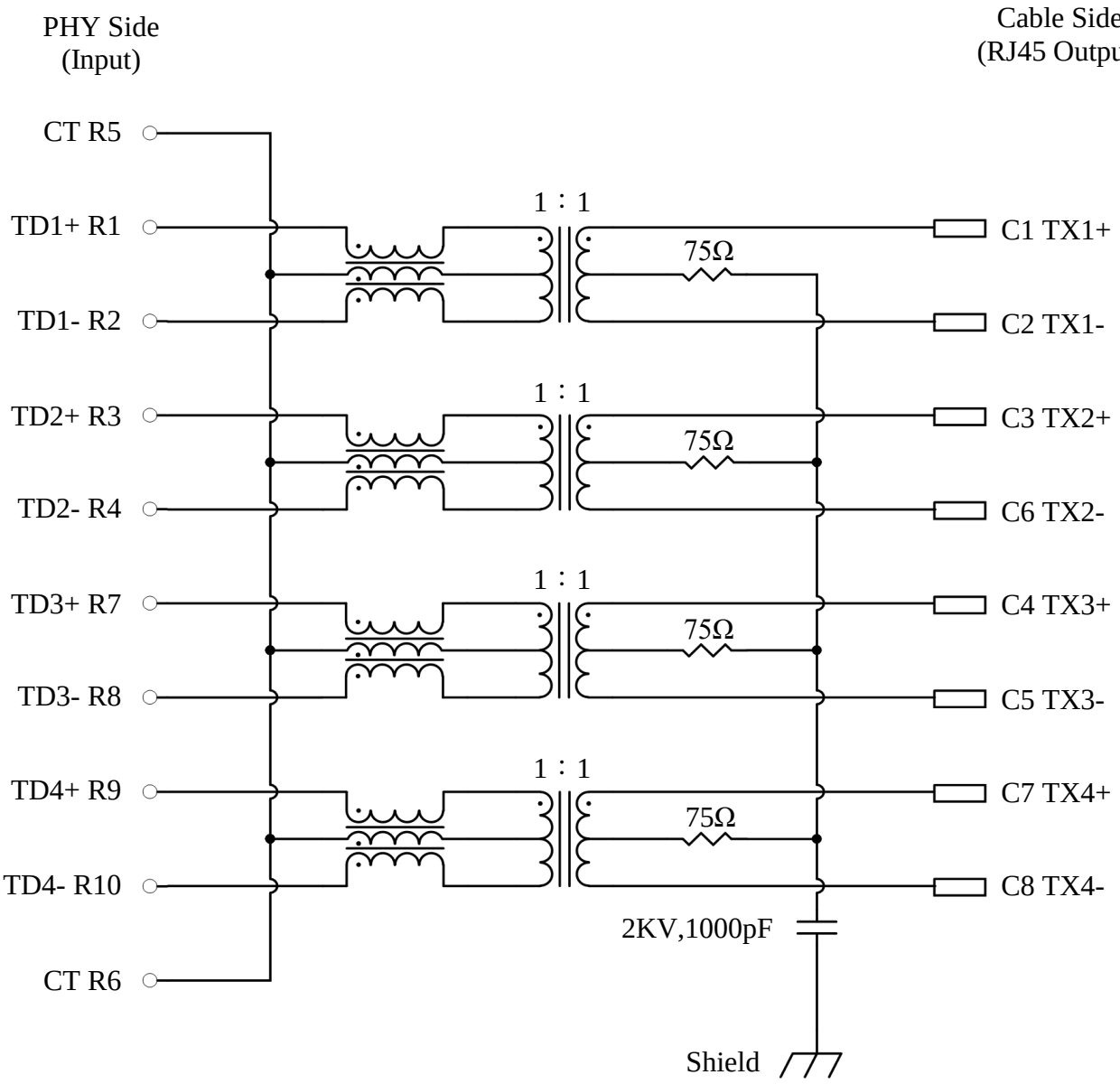
Product is designed to meet electrical, mechanical and environmental performance requirements specified in below table.

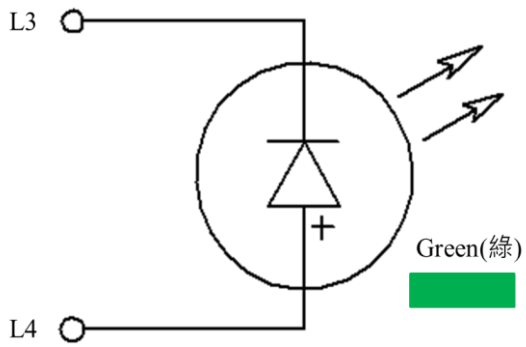
All tests are performed at ambient environmental conditions per MIL-STD-1344A and EIA-364 unless otherwise specified.

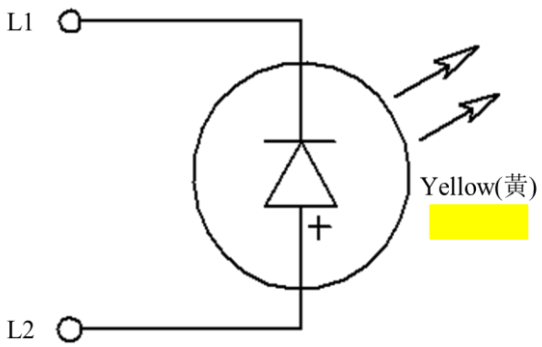
8. Packaging and Packing

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

9. ELECTRICAL CHARACTERISTCS @25℃







Emitting Color	λp (nm)	Vf @If=20mA	Ir @Vr=5V
Yellow	588	1.7 ~2.6 V	10μA max.
Green	570	1.7 ~2.6 V	10μA 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.	load 100Ω
	40~200MHz	-20+15*log(Freq MHz/40MHz) dB min.	load 100Ω

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(Freq MHz/10MHz) dB min

CM to CM Attenuation (REF)

1-200MHZ	-25 dB min

Cross Talk

1~40MHz	-35dB min.
40~125MHz	-35+15log((Freq MHz/40MHz)) dB min.

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

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