

APPROVAL SHEET

To :

Customer P/N :

Singatron P/N : 2TJGDA-SN-0005

Description : RJ45 1X1 Tab Down

Through Hole

2.5G Base-T

Contact Area : 30 μ " Min. Gold

LED : Without LED

POE 60W



Spec No.
GDA19014-00

Update Date
2019/6/10

Revision
A

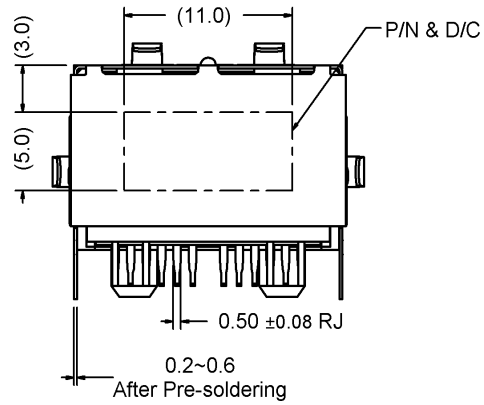
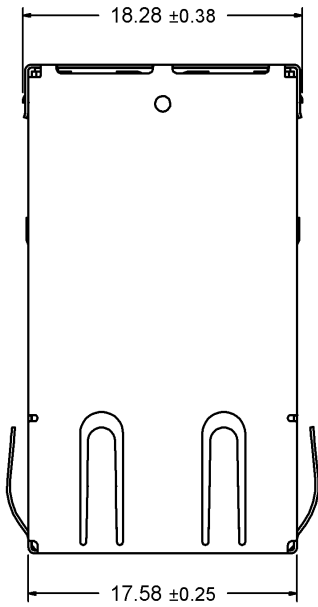
Approved	Checked	Prepared

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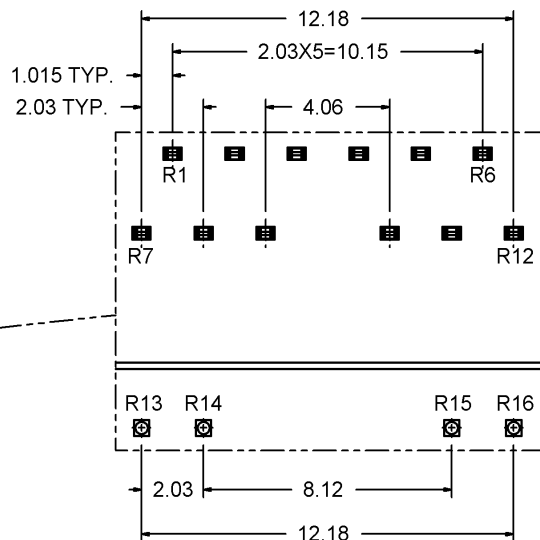
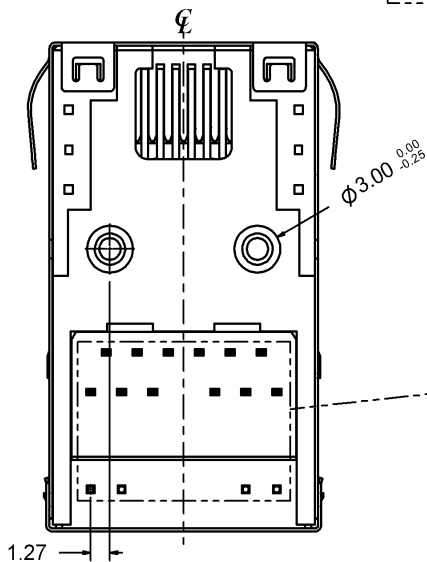
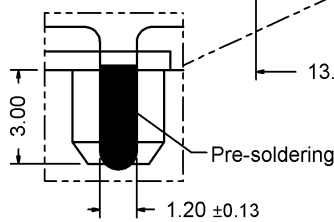
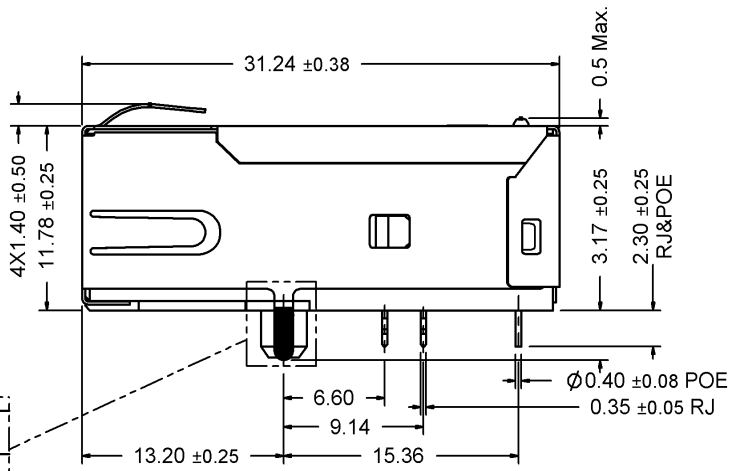
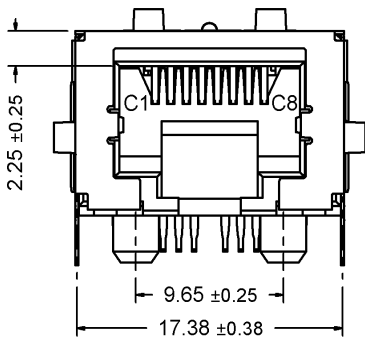
1. MECHANICAL DIMENSION

Product Dimension

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



Back View



Recommended PCB Layout. Component side of board

All dimension units are "mm".

All dimension tolerances are ±0.05mm unless otherwise specified.

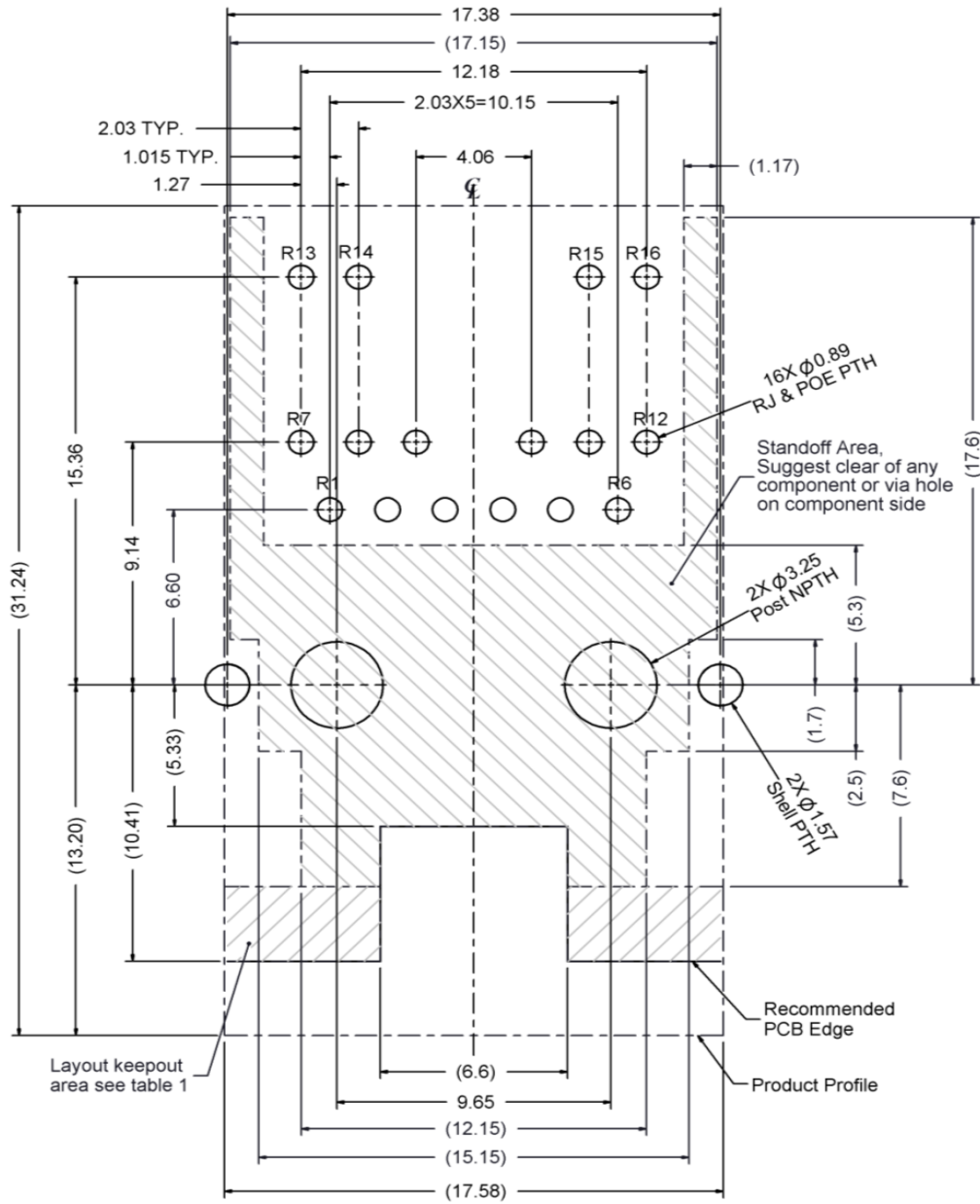
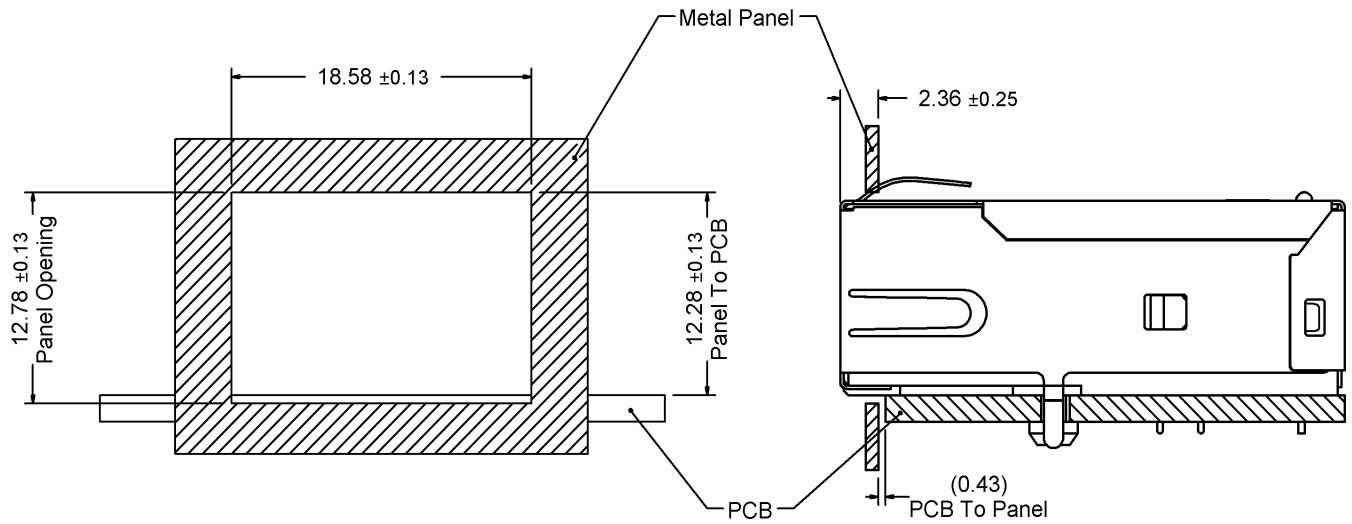


Table1

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



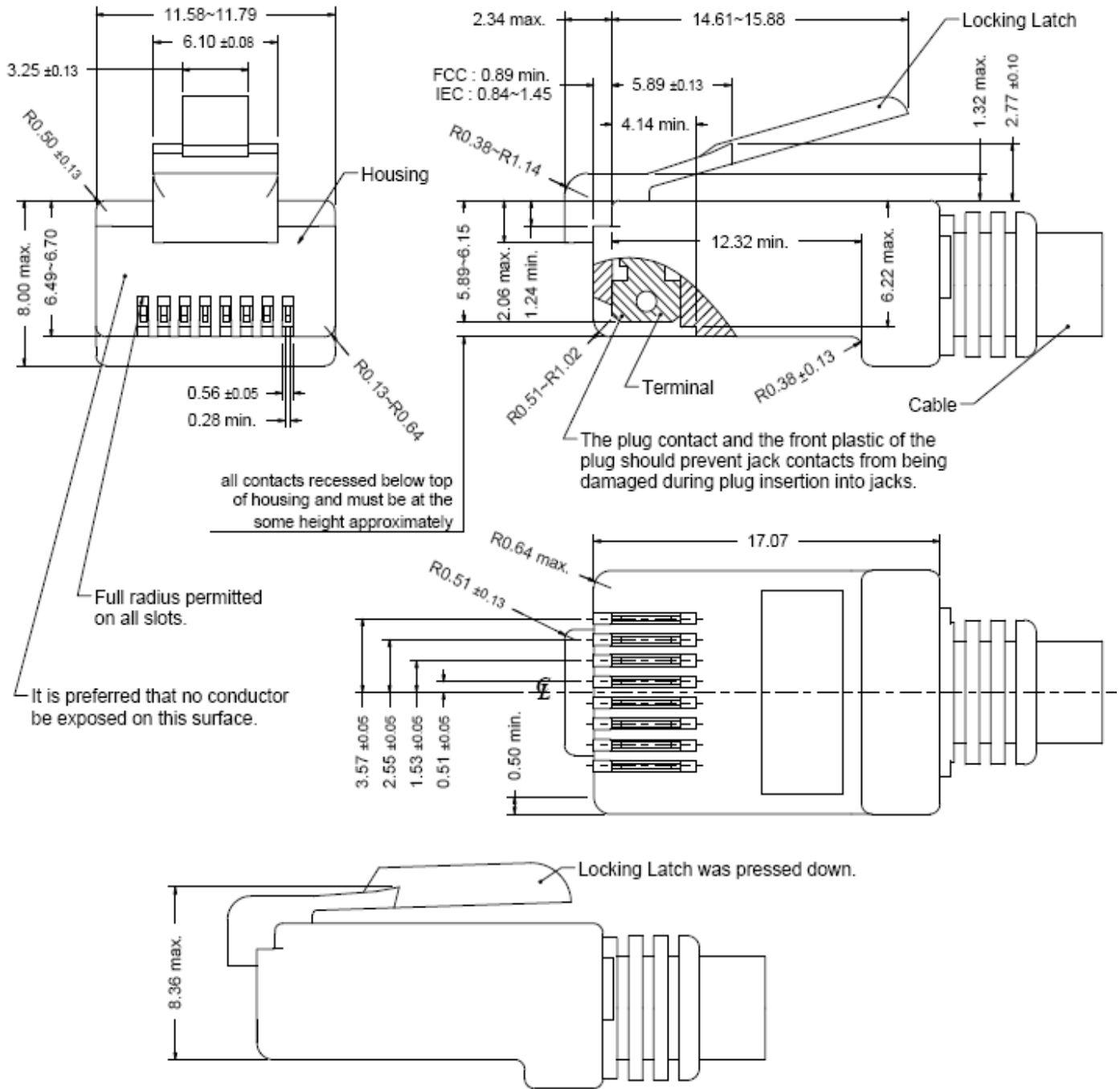
2. Packing Information

40 pcs finished goods per tray

8 trays(280 pcs finished goods) per inner box

4 Inner boxes(1120 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

Case Terminal : Phosphor Bronze, Diameter=0.45mm

Finish : 100 μ " min. Tin

Capacitance Terminal : Phosphor Bronze, Diameter=0.45mm

Finish : 100 μ " min. Matte. Tin

Plastic Parts <UL94V-0>

Housing :PA9T, Black, <UL94V-0>

Case : PM 9630, Black, <UL94V-0>

Spacer :PA9T, Black, <UL94V-0>

Shield Parts

Shield : 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

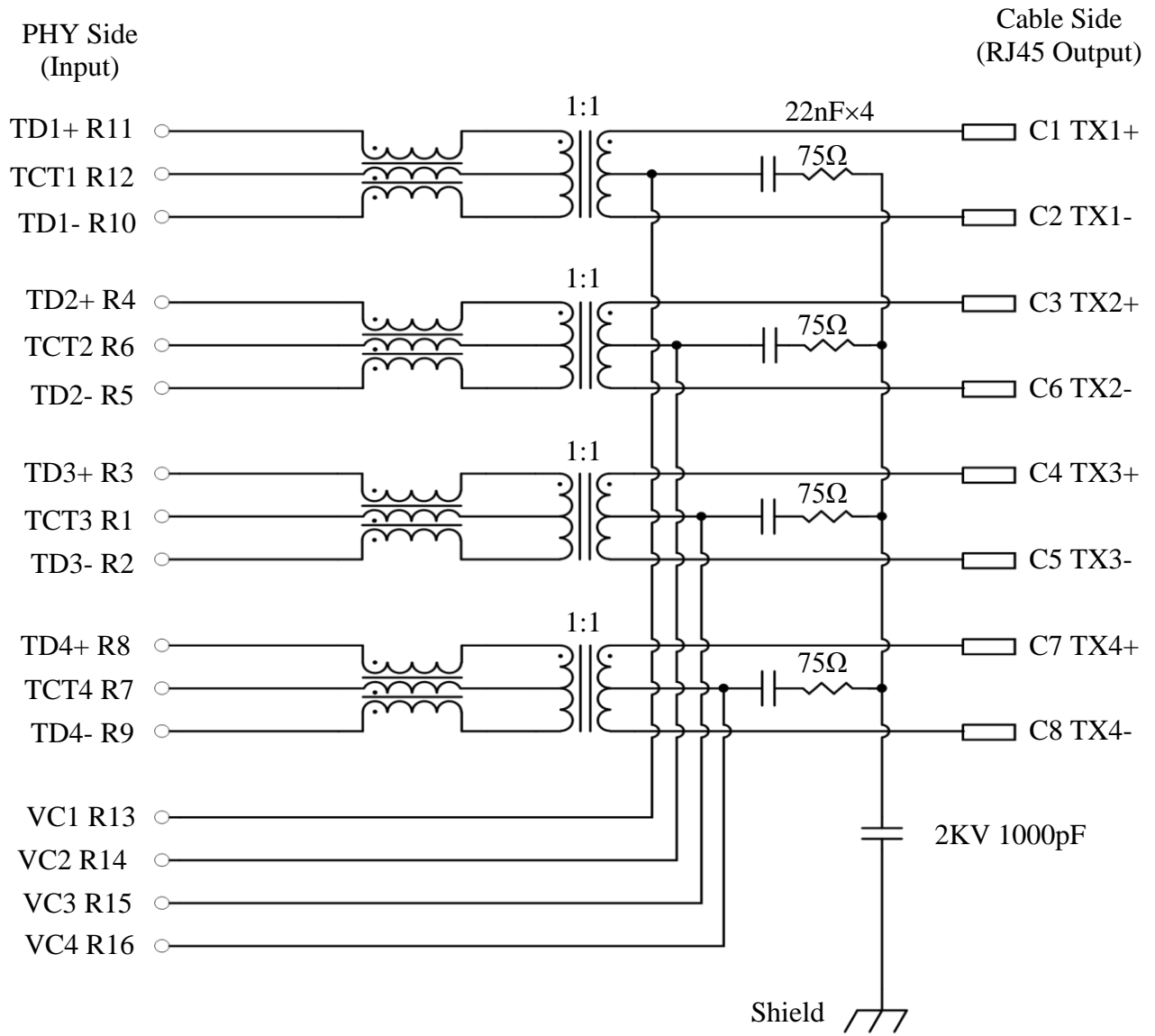
Product is designed to meet electrical, mechanical and environmental performance requirements specified in below table.

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



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 min.

Balanced DC line current

720mA MAX @57VDC continuous

1.2A MAX @57VDC for 200 milliseconds

10. WAVE SOLDERING TEMPERATURE PROFILE

Note :

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

