APPROVAL SHEET

To：

Customer P/N：

UDE P/N： GM8-ZZ-0002

Description： RJ45 multiport 2X8
Through Hole
10G Base-T
Contact Area : 30μ" min. Gold
LED:Without LED

RoHS

Spec No.	Update Date	Revision
GM8-ZZ-0001	2018/4/25	B

Approved	Checked	Prepared

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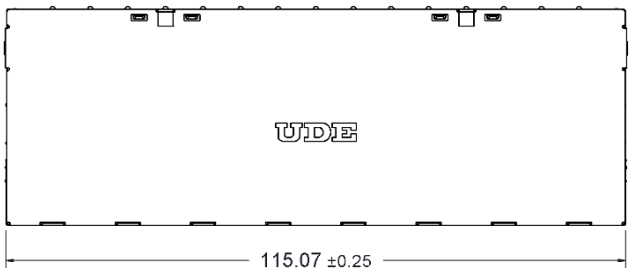
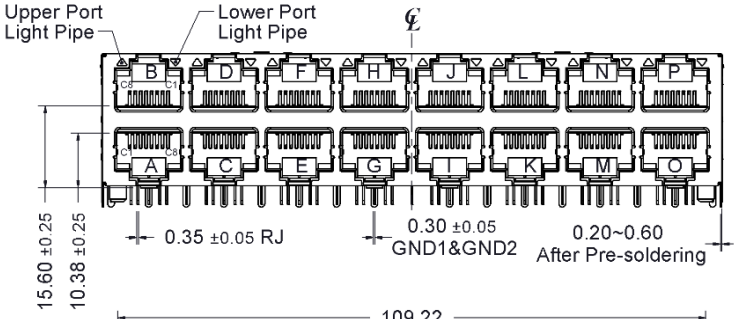
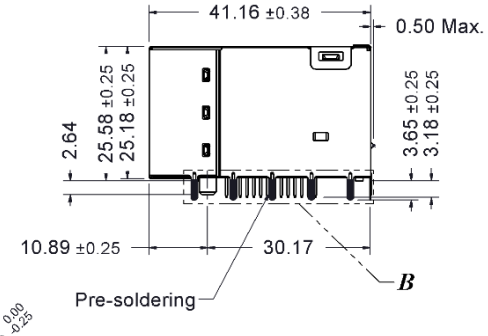
1. MECHANICAL DIMENSION

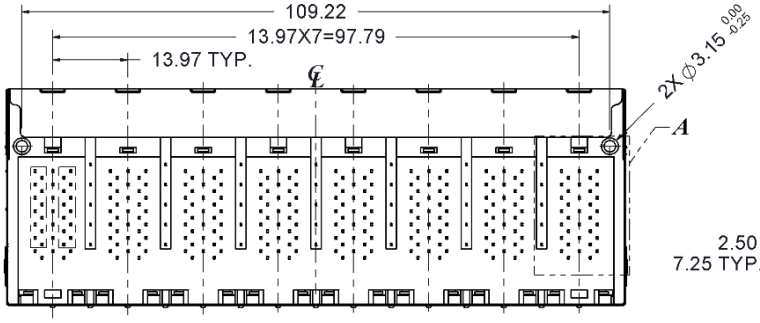
1.1 Product Dimension

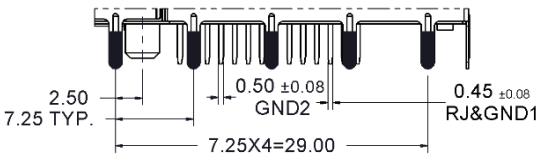
Unit:mm	General Tolerance :	X.X : ± 0.38 X.XX : ± 0.20



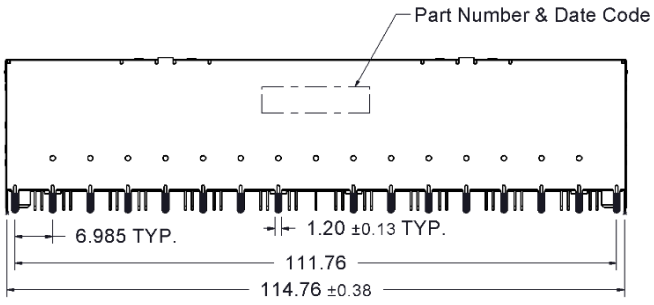


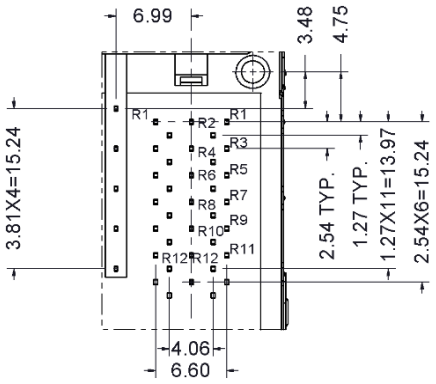






Detail B



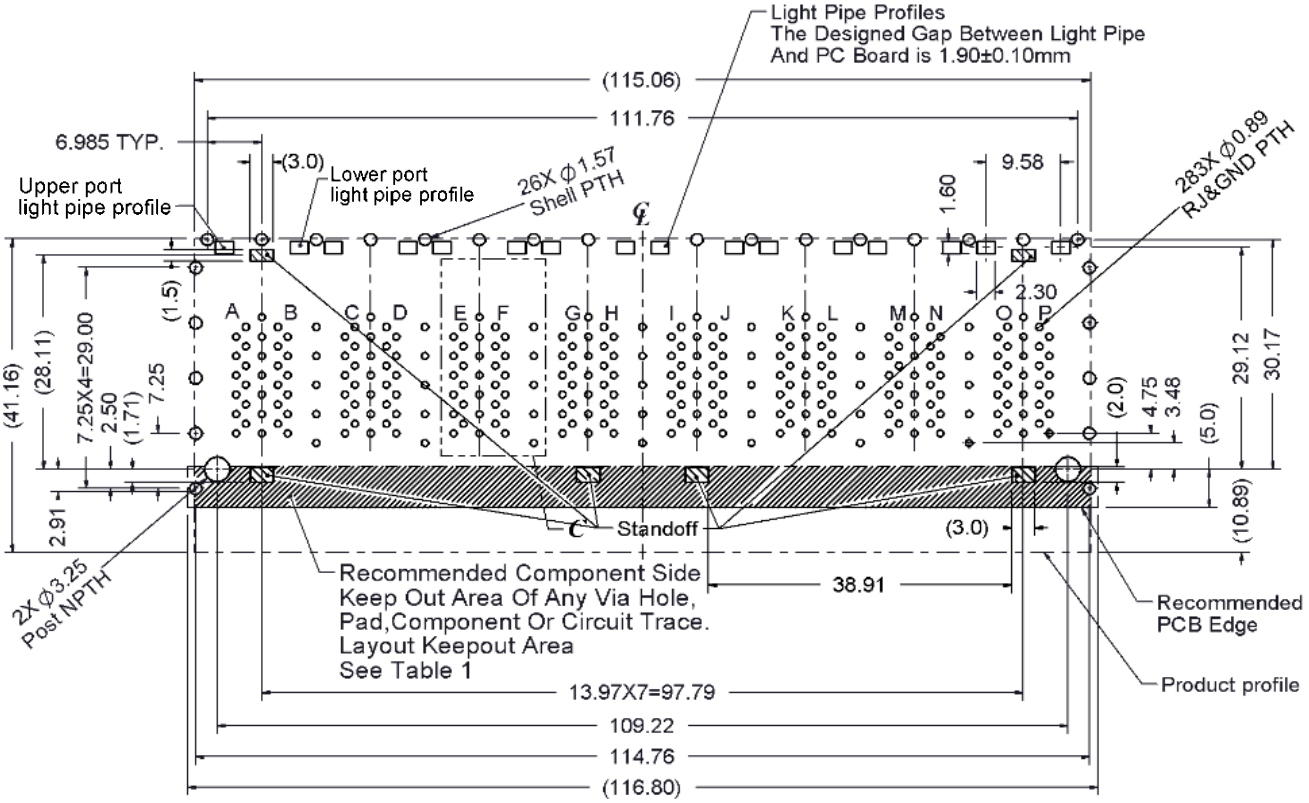


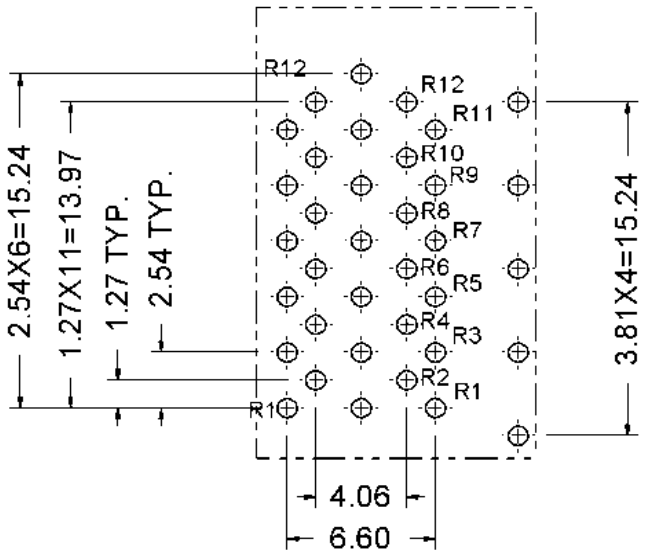
Detail A

1.2 Recommended PCB Layout

Component Side of Board

All dimension tolerances are ±0.05mm unless otherwise specified





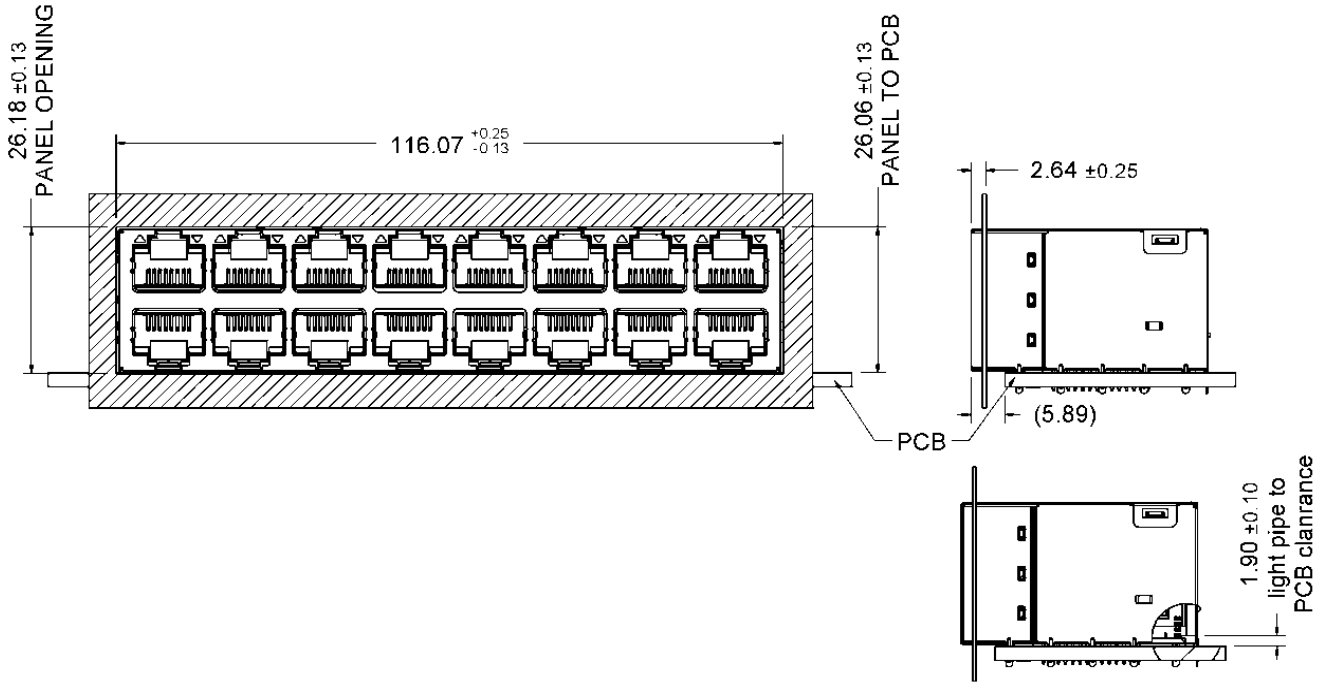
Detail A

Table1

Layer \ Layout	Trace	compo-nent	Groun-ding	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.

1.3 Recommended Panel Cutout



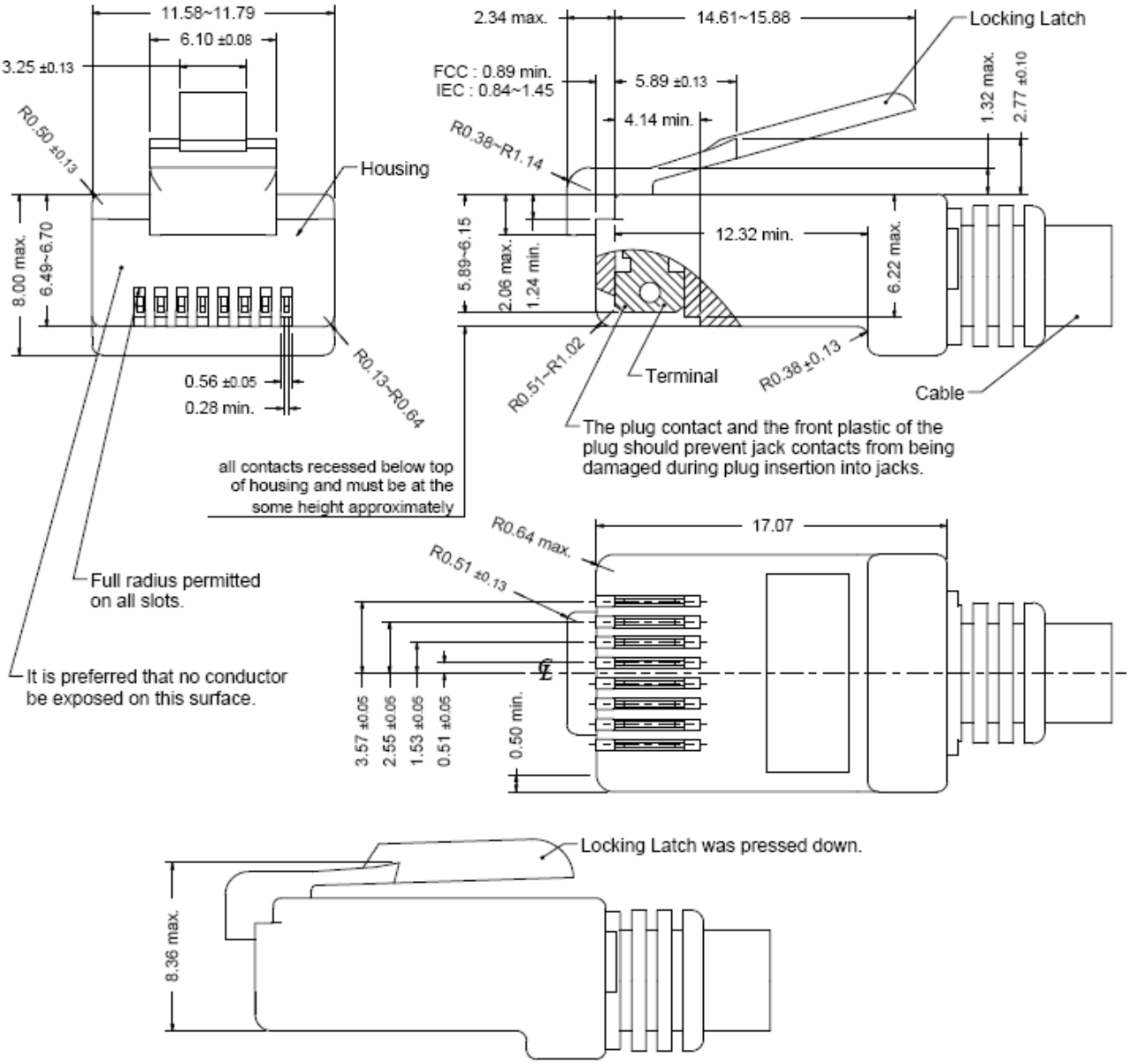
1.4 Packing Information

12 pcs finished goods per tray

4 trays(48 pcs finished goods) per inner box

4 Inner boxes(192 pcs finished goods) per master carton

1.5 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

2. REQUIREMENTS

2.1 Design and Construction

Product shall be of design, construction and physical dimensions specified on applicable.

2.2 Material

2.2.1 Terminal Parts (Underplating : 50μ" min. Nickel overall)

2.2.1.1 RJ Terminal : Phosphor Bronze, Thickness=0.25mm

Finish : Contact Area : 30μ" min. Gold

2.2.1.2 Input Terminal : Brass, Thickness=0.35mm

Finish : 100μ" min. Matte Tin

2.2.1.3 Case Terminal : Brass, Thickness=0.30mm

Finish : 100μ" min. Matte Tin

2.2.1.4 Ground Terminal : Phosphor Bronze, Thickness=0.30mm

Finish : 100μ" min. Matte Tin

2.2.2 Plastic Parts

2.2.2.1 Housing : PA6T, Black, <UL94V-0>

2.2.2.2 Lower Case : PA6T, Nature, <UL94V-0>

2.2.2.3 Upper Case : PA6T, Black, <UL94V-0>

2.2.2.4 Spacer : PA6T, Black, <UL94V-0>

2.2.2.5 RJ IM : PA6T, Black, <UL94V-0>

2.2.2.6 Ground IM : PA6T, Black, <UL94V-0>

2.2.2.7 Light Pipe : PC, Transparent <UL94 HB>

2.2.3 Shield Parts

2.2.3.1 GND Spring : Phosphor Bronze, Thickness=0.20mm

Finish : 100μ" min. Matte Tin

2.2.3.2 Front Shield : Stainless steel, Thickness=0.20mm, Pre-soldering

2.2.3.3 Back Shield : Stainless steel, Thickness=0.20mm, Pre-soldering

2.2.3.4 Gasket Shield : Stainless steel, Thickness=0.30mm

2.3 Operating and Storage Temperature

Operating Temperature : 0℃ to +70℃

Storage Temperature : -40℃ to +85℃

2.4 RJ45 specifications

Insulation Resistance : 500MΩ min.

Insertion force with the latch depressed : 22N max

Removal force with the latch depressed : 44N max

Locking Force of Plug Latch : 50N min. @ 60+/-5 sec

Durability : 2500 cycles

2.5 Performance and Test Description

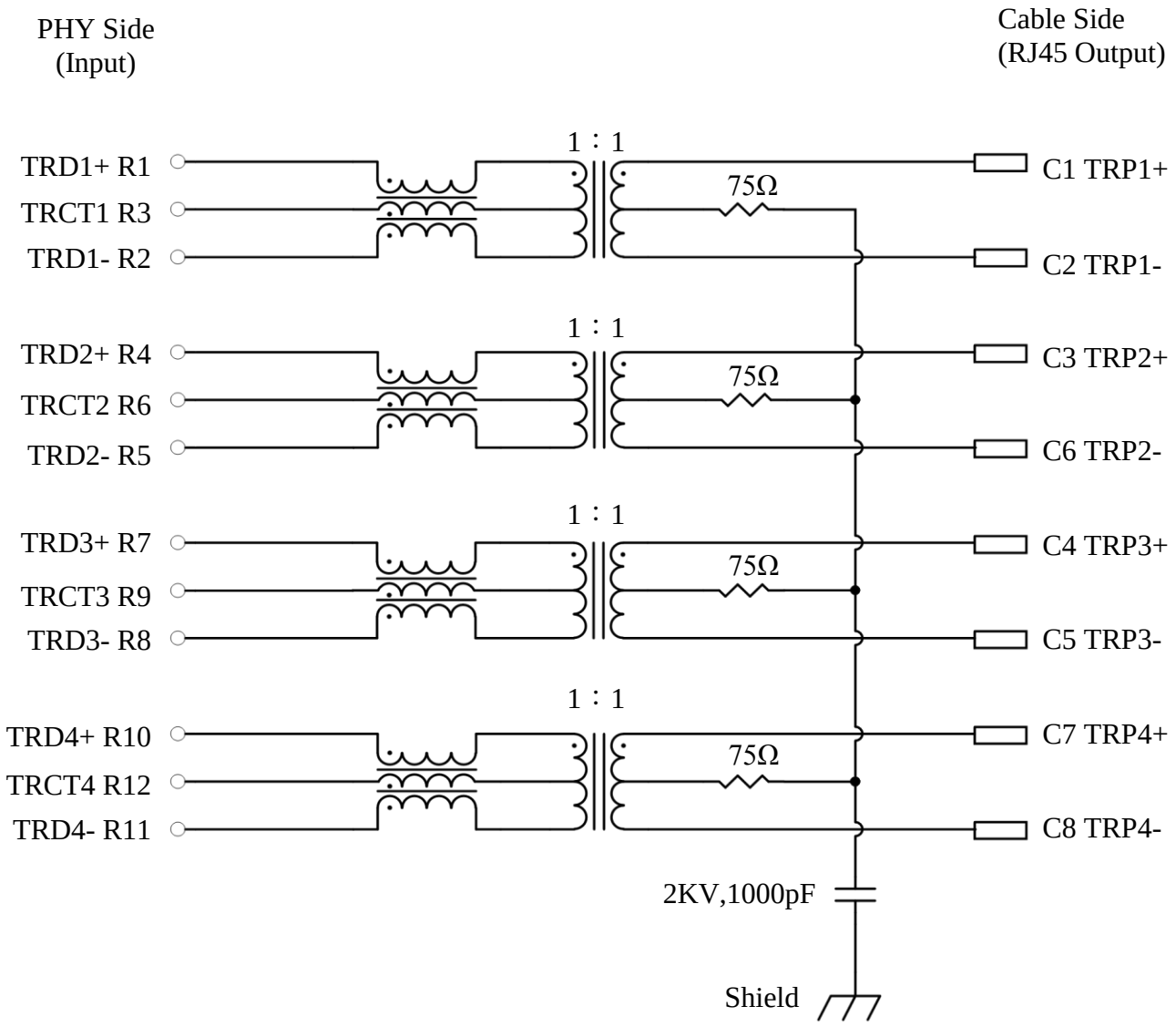
Product is designed to meet electrical, mechanical and environmental performance requirements specified in below table. All tests are performed at ambient environmental conditions per MIL-STD-1344A and EIA-364 unless otherwise specified.

2.6 Packaging and Packing

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

3. ELECTRICAL CHARACTERISTCS @ 25℃

3.1 Schematic



3.2 Transmitter filter & Receiver filter

Type : Balance low pass 100Ω impedance

Insertion Loss

1MHZ	-0.8 dB Max
20MHZ	-0.8 dB Max
50MHZ	-1.0 dB Max
200MHZ	-1.2 dB Max
400MHZ	-2.0 dB Max
500MHZ	-3.0 dB Max

3.3 Return Loss

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

3.4 Reflected CM to Diff Conversion (REF)

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

3.5 Reflected Diff to CM Conversion (REF)

1MHZ -48 dB Min

100MHZ -35 dB Min

400MHZ -24 dB Min

500MHZ -24 dB Min

3.6 Diff to CM Conversion (REF)

50MHZ -48 dB Min

100MHZ -42 dB Min

200MHZ -36 dB Min

300MHZ -33 dB Min

400MHZ -30 dB Min

500MHZ -28 dB Min

3.7 CM to CM Attenuation

1MHZ -22 dB Min

500MHZ -20 dB Min

800MHZ -20 dB Min

1000MHZ -17 dB Min

3.8 Cross Talk

1MHZ -34 dB Min

350MHZ -23 dB Min

500MHZ -23 dB Min

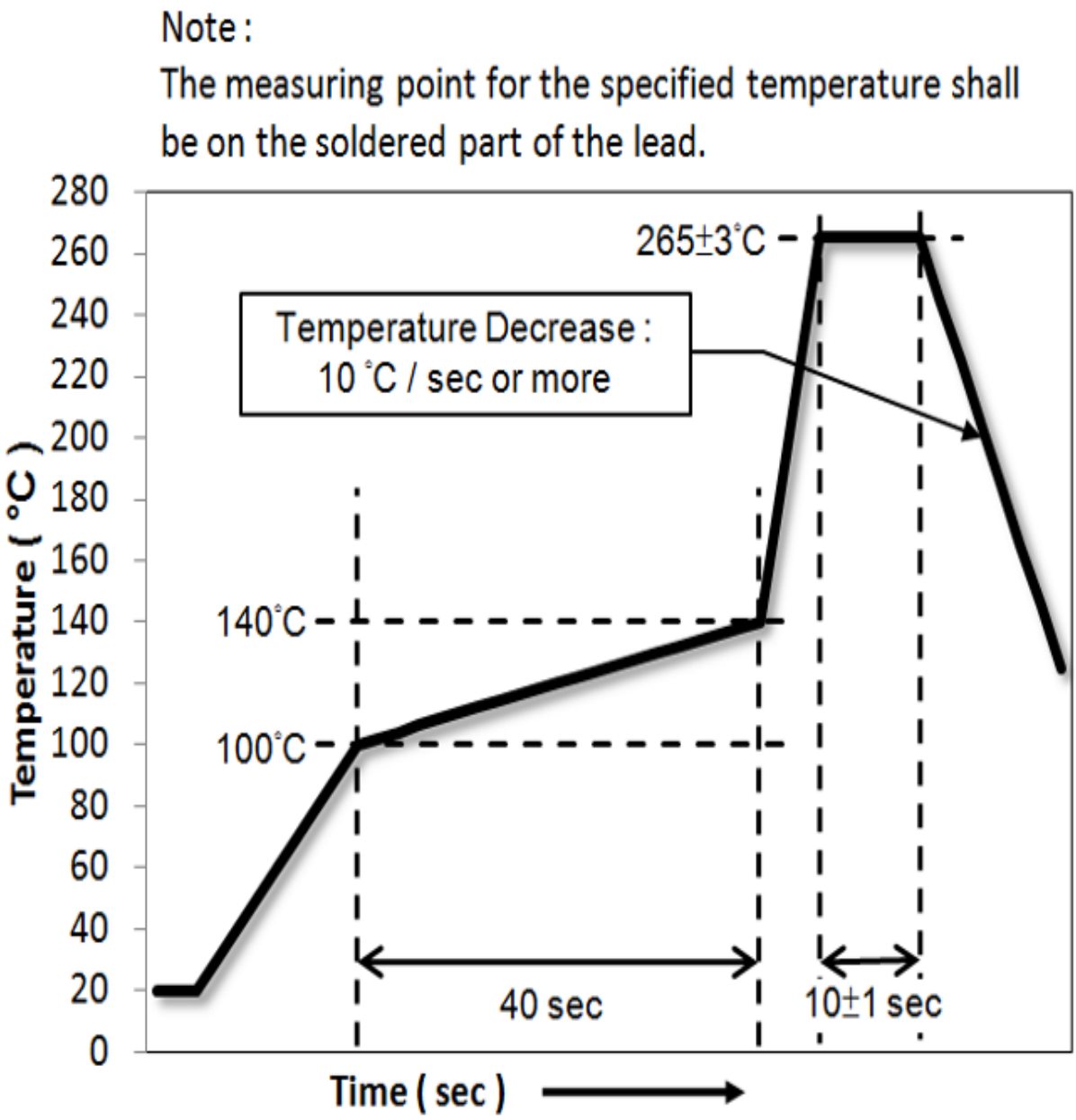
3.9 Inductance @ 100KHz, 0.1V 8mA DC BIAS

Input (R1-R2), Input(R4-R5), Input (R7-R8), Input(R10-R11): 160 μH min.

3.10 HiPot Test

Input(R1-R2)	To	Output(C1-C2) :	1500Vac 60s or 2250Vdc 60s
Input(R4-R5)	To	Output(C3-C6) :	1500Vac 60s or 2250Vdc 60s
Input(R7-R8)	To	Output(C4-C5) :	1500Vac 60s or 2250Vdc 60s
Input(R10-R11)	To	Output(C7-C8) :	1500Vac 60s or 2250Vdc 60s

4. WAVE SOLDERING TEMPERATURE PROFILE



5. Revision History

Issue Date	Revision	Comments	Operator
2016/6/6	A	Initial Release .	Ray
2018/4/25	B	Update PCB Layout And RJ Terminal Plastic Parts	Max