

APPROVAL SHEET

To :

Customer P/N :

UDE P/N : 0D-ZZ-0017

Description : Double RJ45+USB 2.0

Through Hole

10/100 Base-T

Contact Area : 30μ" Min. Gold

LED : L-Green; R-Green

Light Pipe: Upper Port



Spec No.
0D-20007-00

Update Date
2020/9/16

Revision
A

Approved	Checked	Prepared



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Revision History

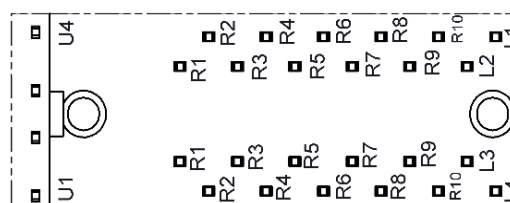
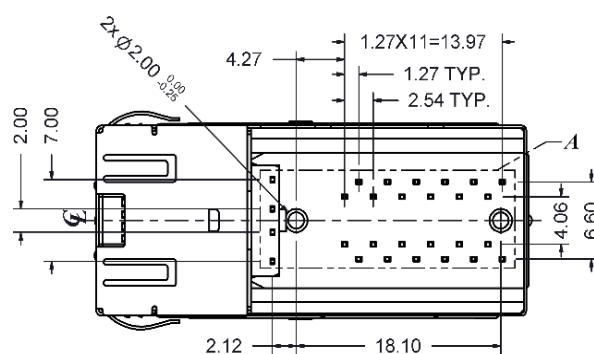
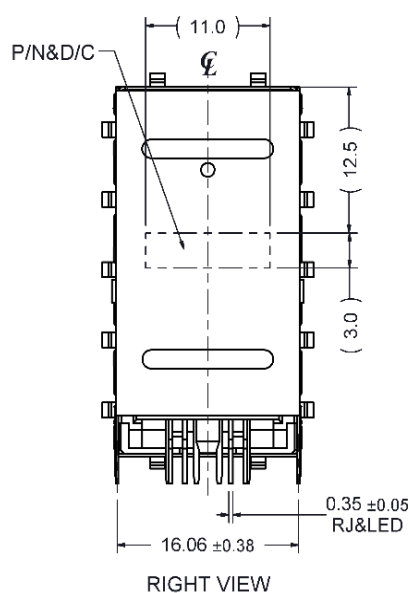
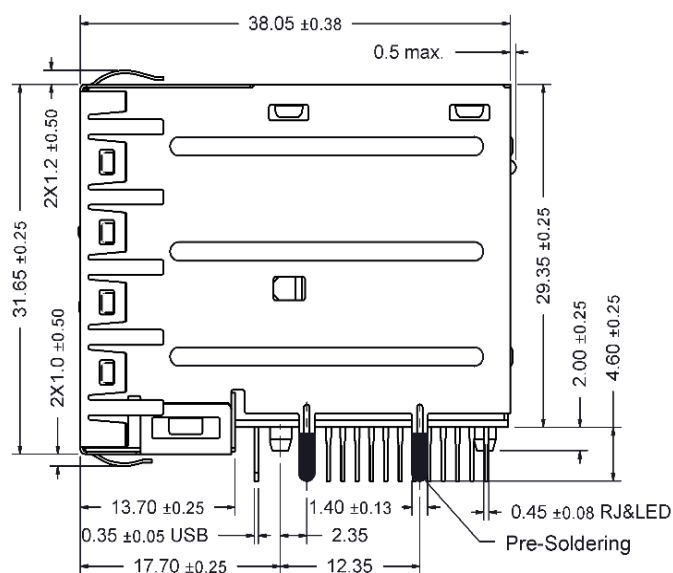
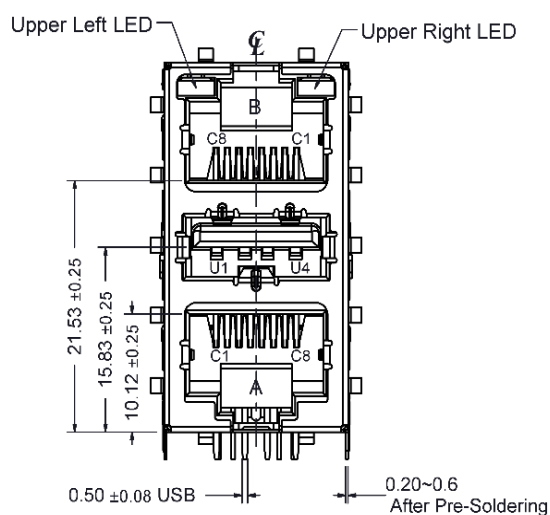
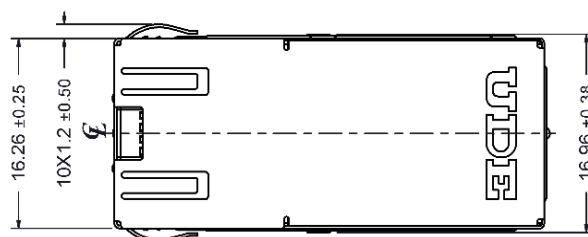
[illegible]

1. MECHANICAL DIMENSION

Product Dimension

Unit:mm

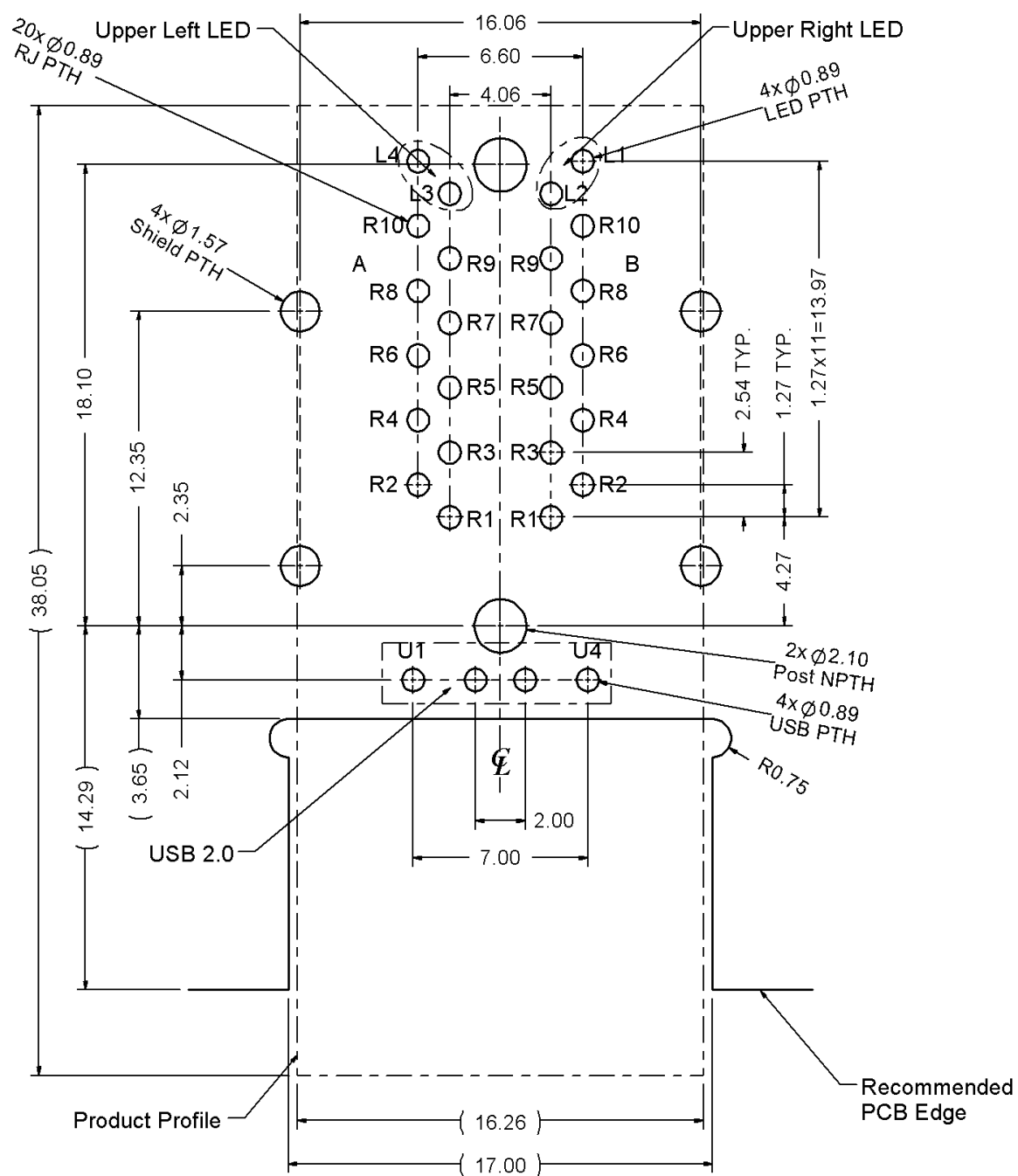
General Tolerance : X.X : ± 0.38
X.XX : ± 0.20



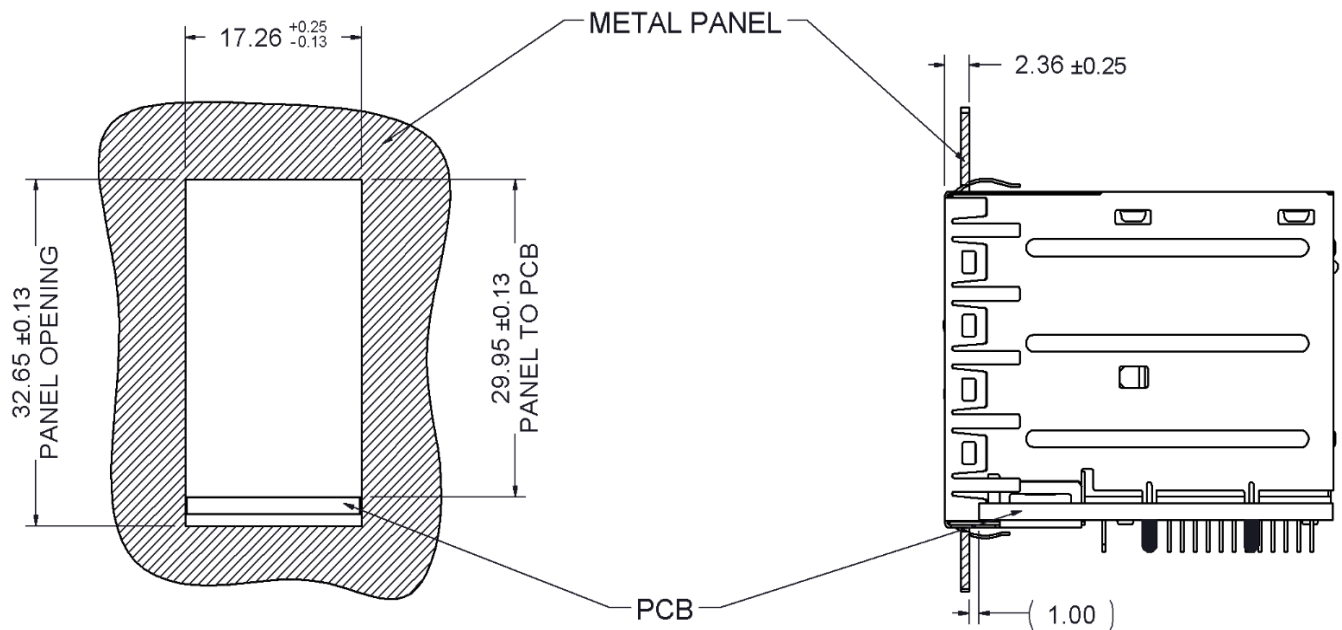
DETAIL A
SCALE 3 : 1

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



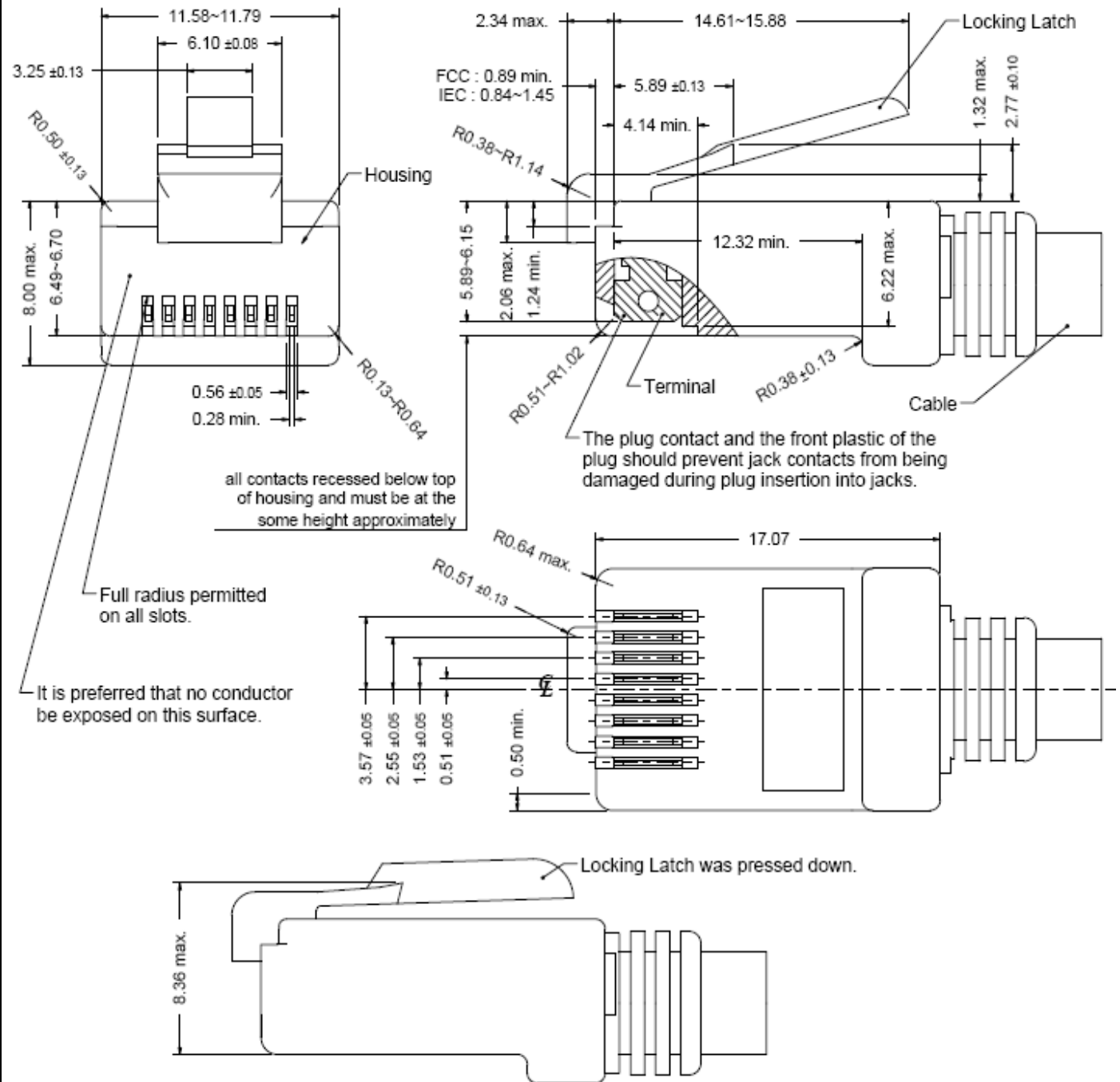
2. Packing Information

40 pcs finished goods per tray

4 trays(160 pcs finished goods) per inner box

4 Inner boxes(640 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.

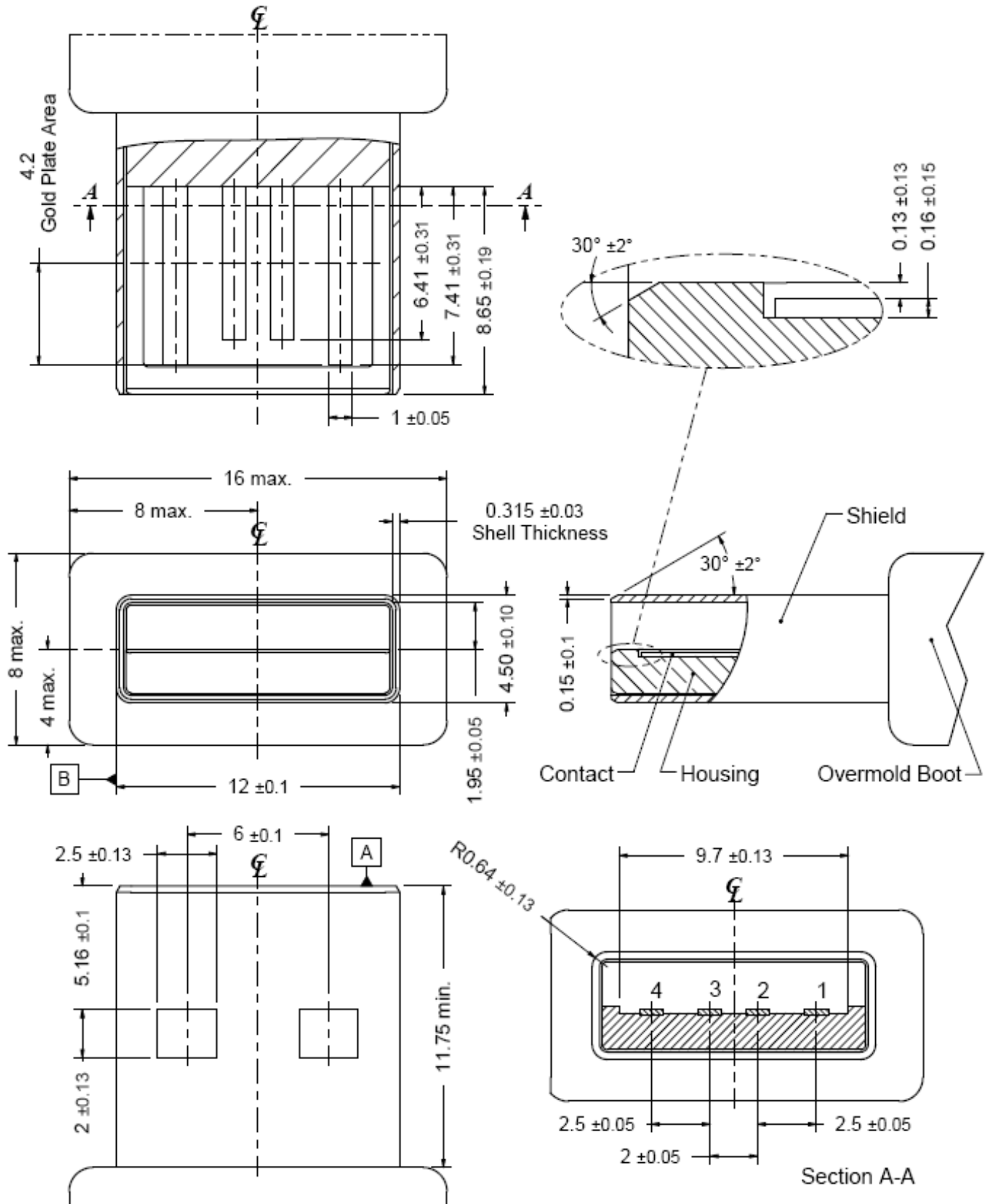
Gauge follow : FCC subpart F, 68,500, Figure (C)(4)(i) & (C)(5)(i)

- There must be no damage to Housing and Locking Latch.

- There must be no nicks and cuts in cable.

- Durability : 750 cycles generally

4. Standard USB 2.0 Plug Specification



- All dimensions follow : Universal Serial Bus Specification 2.0 (April 27,2000)

Figure 6-9. USB Series A Plug Interface Drawing

5. 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=0.35mm

Finish : RJ Contact Area : 30 μ " min. Gold

USB Terminal : Phosphor Bronze, Thickness=0.25mm

Finish : USB Contact Area : 30 μ " min. Gold

Case Terminal : Brass, Thickness=0.30mm

Finish : 100 μ " min. Matte Tin

Input&LED Terminal : Brass, Thickness=0.35mm

Finish : 100 μ " min. Matte Tin

USB Link Terminal : Brass, Thickness=0.35mm

Finish : 100 μ " min. Matte Tin

GND Terminal : Phosphor Bronze, Thickness=0.35mm

Finish : 100 μ " min. Matte Tin

Plastic Parts

Housing : LCP, Black, <UL94V-0>

Case : LCP, Black, <UL94V-0>

Spacer : LCP, Black, <UL94V-0>

USB Tongue : PA6T, Black, <UL94V-0>

USB Tongue Holder : LCP, Black, <UL94V-0>

USB Holder IM: LCP, Black, <UL94V-0>

RJ IM: LCP, Black, <UL94V-0>

Light Pipe: PC, Transparent, <UL94V-0>

Shield Parts

Front Shield : Stainless Steel, Thickness=0.20mm, unplating

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

6. Operating and Storage Temperature

Operating Temperature : 0°C to +70°C

Storage Temperature : -40°C to +85°C

7. 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

8. USB 2.0 specifications

Insulation Resistance : 1000MΩ min.

Dielectric Withstanding Voltage : 500Vac @1min.

Insertion force : 35N max.

Removal force : 10N min.

Durability : 1500 cycles

9. 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.

10 Packaging and Packing

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

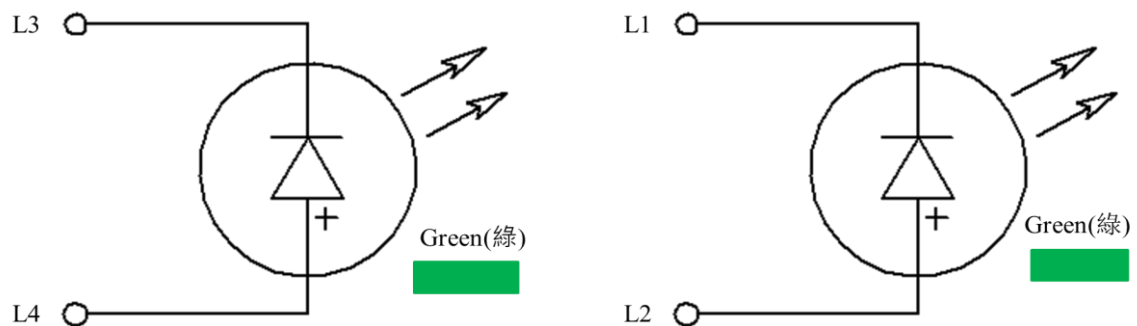
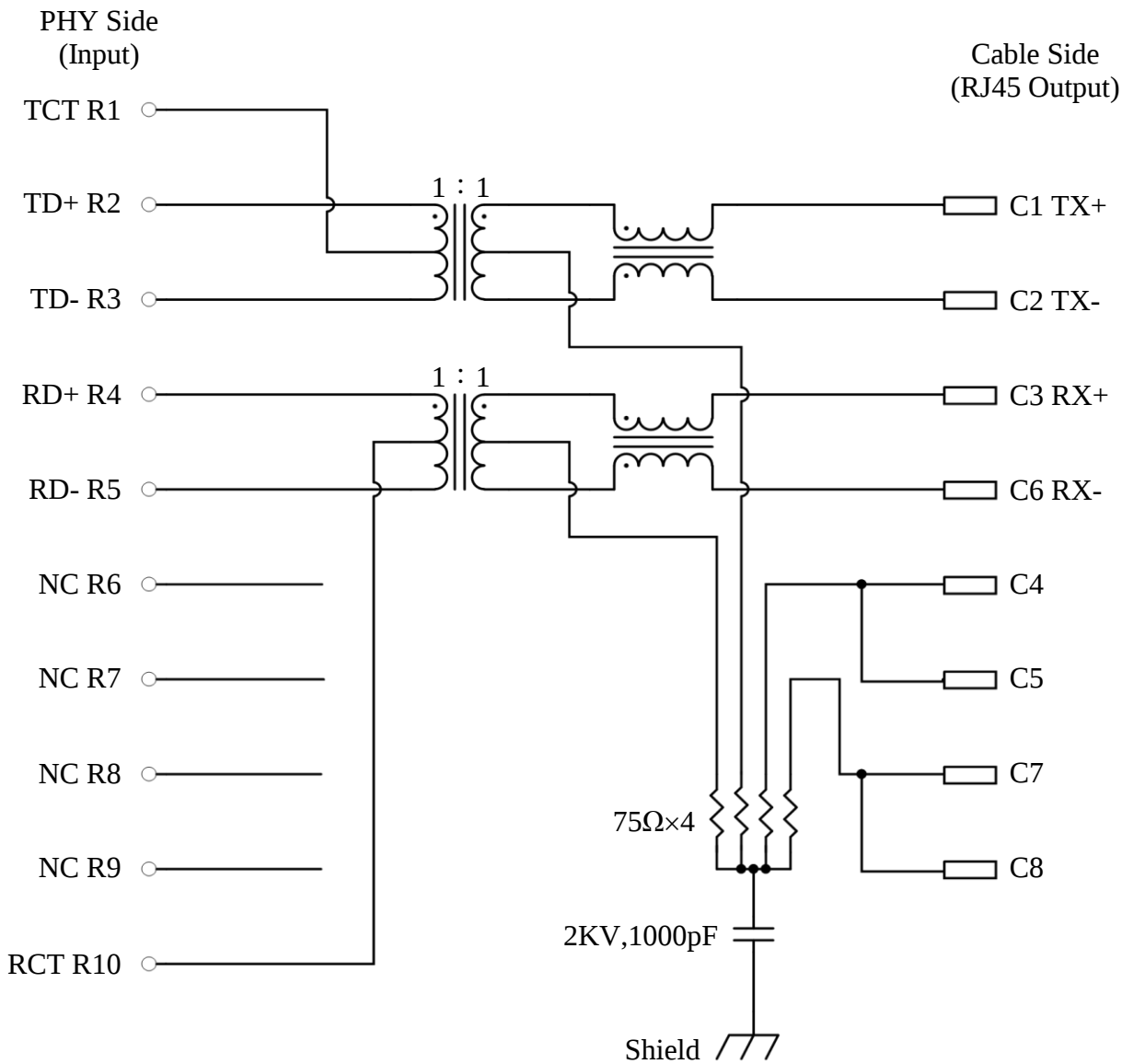
11. USB 2.0 Standard-A Schematic



USB 2.0 Standard-A Pin Assignment

Pin Number	Signal Name	Description	Mating Sequence
U1	VBUS	Power	Second
U2	D-	USB2.0 Differential pair	Third
U3	D+		
U4	GND	Ground for power return	Second
Shell	Shield	Connector metal shell	First

12. ELECTRICAL CHARACTERISTICS @25°C



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

Transmitter filter & Receiver filter

Type : Balance low pass 100Ω impedance

Insertion loss : 1~100MHz -1.0dB Max.

Return loss :	1~30MHz	-18dB Min.	load 100Ω
	30~60MHz	-16dB Min.	load 100Ω
	60~80MHz	-12dB Min.	load 100Ω

Common Mode Rejection

@1~100 MHz -30dB Min.

Cross Talk

@ 1~100MHz -30dB Min.

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

Input(TD+, TD-); (RD+, RD-) : 350 μH Min.

HiPot Test

PHY Side(Input) To Cable Side(Output) : 1500Vac 60s or 2250Vdc 60s

13. WAVE SOLDERING TEMPERATURE PROFILE

Note :

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

