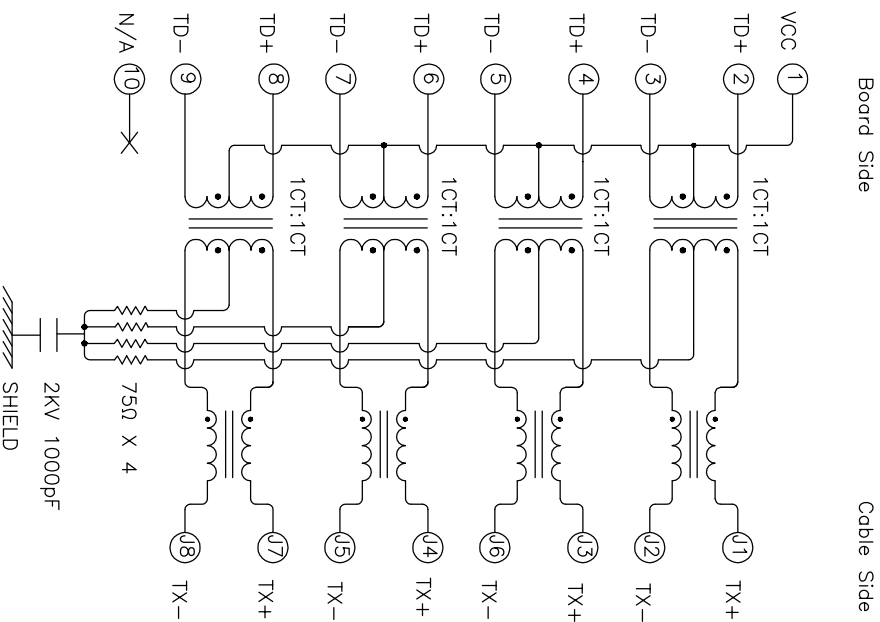


版本	描述	日期	设计人
A	NEW DESIGN	2021.12.17	Jerry Lee

3. Schematics:

4. RJ45 Electrical Specification @25°C :



PARAMETER	SPECIFICATIONS
OPERATING TEMPERATURE	0°C TO +70°C
TURNS RATIO	1.00 ± 2%
POLARITY	PER SCHEMATIC
INSERTION LOSS (SDD21&SDD12)	1-50MHz -0.5 DB MAX 50-125MHz -1.0 DB MAX
PHY-SIDE RETURN LOSS (SDD11-Zref=100 OHMS ± 1%)	1-40MHz -20 DB MIN 40-200MHz -[20+15*LOG ₁₀ (f/40)] DB MIN
LINE-SIDE RETURN LOSS (SDD22-Zref=100 OHMS ± 1%)	1-40MHz -20 DB MIN 40-200MHz -[20+15*LOG ₁₀ (f/40)] DB MIN
INDUCTANCE (OCI)	150 uH MIN @ 100KHz, 100mV
CROSSTALK, ADJACENT CHANNELS (SDD21-ADJ.)	1-125MHz -30 DB MIN
COMMON MODE REJECTION RATIO (SCC21)	30-200MHz -30 DB MIN
COMM. TO DIFF. REJECTION RATIO (SCC12)	10-125MHz -45+f/35 DB MIN
INPUT-OUTPUT ISOLATION	2250 VDC FOR 60 SECONDS

NOTE: f IS FREQUENCY IN MHZ.

<p>UNIT: mm [inch]</p>	<p>DESIGN: Jerry Li</p>	<p>Part Name: RJ45 with USB3.0, with 2.5G base transformer, with LEDs</p>
<p>TOLERANCE: X.X ±0.35 X.XX ±0.25 X.XXX ±0.15 Angle ±3.0°</p>	<p>CHECKED: Jerry Li</p>	<p>Part No. XNT-113A3DB-G09C</p>
<p>SCALE:1:1 SIZE:A4</p>	<p>APPROVED: J Mou</p>	<p>Datw No. SLC-XXXX-A</p>
		<p>Page No. 02 OF 03</p>

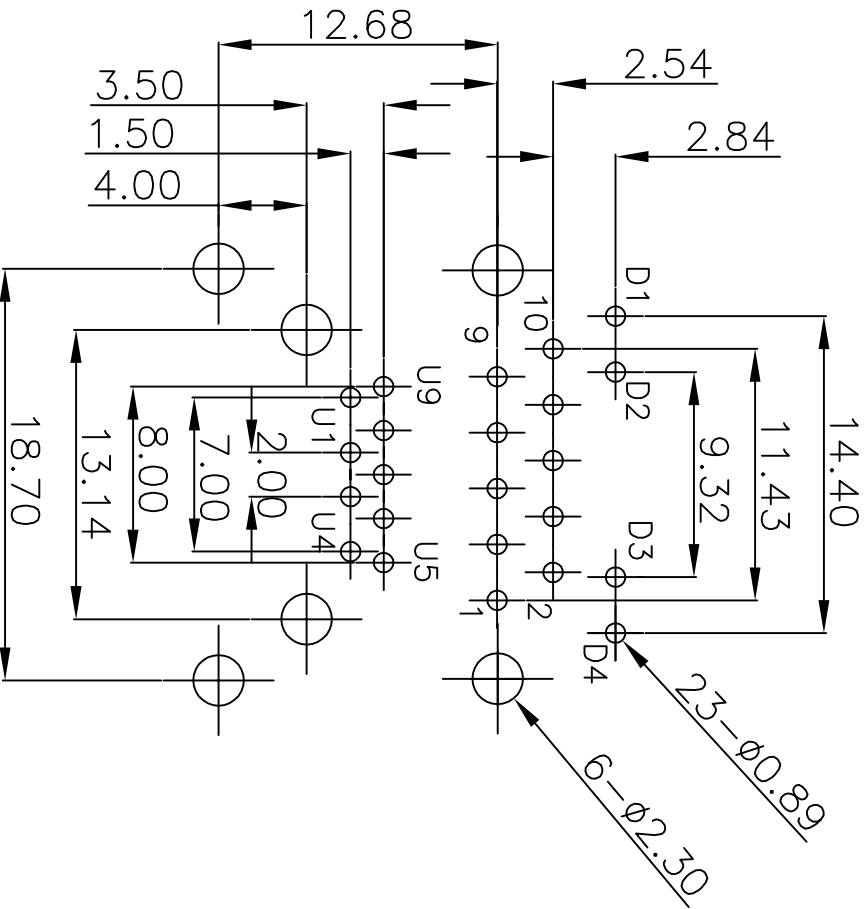
深圳市鑫南天科技有限公司
Shen zhen Shi Xin Nan Tian Industrial Co., Ltd

A B C D E

1 2 3 4 5 6 7

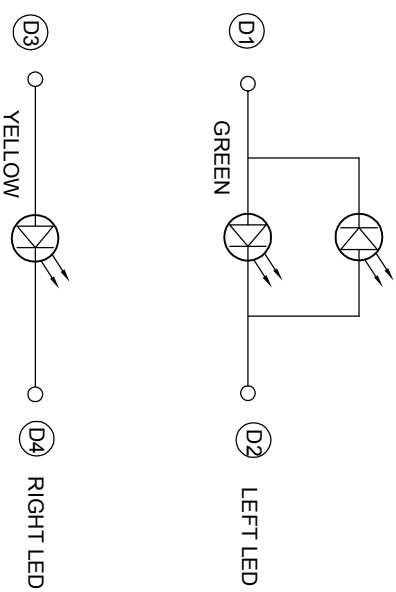
版本	描述	日期	设计人
A	NEW DESIGN	2021.12.17	Jerry Lee

5. PCB LAYOUT:



RECOMMEND PCB LAYOUT
 ALL TOLERANCE ARE: ±0.05mm
 (TOP VIEW) PCB THICKNESS=1.6mm

6.LED Information:



LED Color	λ P(nm)	V _F @I _F =20mA	IR @V _R =5V
GREEN	565	1.8~2.4 V	10 uA max
YELLOW	585	1.8~2.4 V	10 uA max

<p>UNIT: mm [inch]</p> <p>TOLERANCE: X.X ±0.35 X.XX ±0.25 X.XXX ±0.15 Angle ±3.0°</p> <p>SCALE:1:1 SIZE:A4</p>	<p>DESIGN: Jerry Li</p> <p>CHECKED: Jerry Li</p> <p>APPROVED: J Mou</p>	<p>Part Name: RJ45 with USB3.0, with 2.5G base transformer, with LEDs</p> <p>Part No. XNT-113A3DB-G09C</p> <p>Datw No. SLC-XXXX-A</p> <p>Page No. 03 OF 03</p>
--	---	---

深圳市鑫南天科技有限公司
 Shen zhen Shi Xin Nan Tian Industrial Co., Ltd

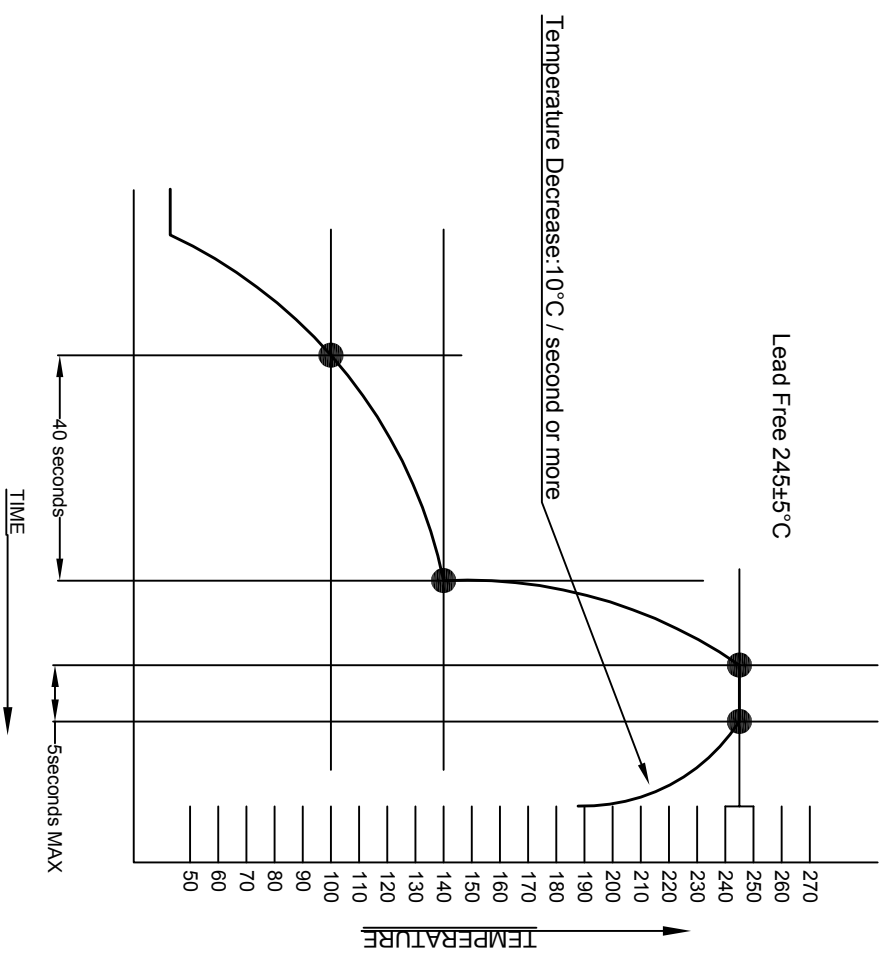
版本	描述	日期	设计人
A	NEW DESIGN	2021.12.17	Jerry Lee

7. USB3.0 STANDARD-A CONNECTOR PIN ASSIGNMENTS:

PIN NUMBER	SIGNAL NAME	DESCRIPTION
U1	VBUS	POWER
U2	D-	USB2.0 DIFFERENTIAL PAIR
U3	D+	
U4	GND	GROUND FOR POWER RETURN
U5	SIDA_SSRX-	SUPERSPEED RECEIVER
U6	SIDA_SSRX+	DIFFERENTIAL PAIR
U7	GND_DRAIN	GROUND FOR SIGNAL RETURN
U8	SIDA_SSTX-	SUPERSPEED TRANSMITTER
U9	SIDA_SSTX+	DIFFERENTIAL PAIR

9. Wave soldering process temperature profile:

(Note: The measuring point for the specified temperature shall be on the soldered part of the leads



8. RJ45 CONNECTOR PIN ASSIGNMENTS:

PIN NUMBER	SIGNAL NAME	DESCRIPTION
J1	TX_D1+	TRANCEIVE DATA+ (发信号+)
J2	TX_D1-	TRANCEIVE DATA- (发信号-)
J3	RX_D2+	RECEIVE DATA+ (收信号+)
J4	BL_D3+	BI-DIRECTIONAL DATA+ (双向数据+)
J5	BL_D3-	BI-DIRECTIONAL DATA- (双向数据-)
J6	RX_D2-	RECEIVE DATA- (收信号-)
J7	BL_D4+	BI-DIRECTIONAL DATA+ (双向数据+)
J8	BL_D4-	BI-DIRECTIONAL DATA- (双向数据-)

		深圳市鑫南天科技有限公司 Shen zhen Shi Xin Nan Tian Industrial Co., Ltd	
UNIT: mm [inch]	DESIGN: Jerry Li	Part Name: R145 with USB3.0, with 2.5G base transformer, with LEDs	
TOLERANCE: X.X ±0.35 X.XX ±0.25 X.XXX ±0.15 Angle ±3.0°	CHECKED: Jerry Li	Part No. XNT-113A3DB-G09C	Darw No. SLC-XXXX-A
SCALE:1:1 SIZE:A4	APPROVED: J Mou	Page No. 03 OF 03	