



REV.	Change Content	Date
A	Initial Release	DEC.18.2018
B	Initial Release	APR.19.2019

NOTES: UNLESS OTHERWISE SPECIFIED

1. THIS COMPONENT CONFORMS TO UL60950.

	WARNING: THIS COMPONENT IS RECOGNIZED BY ONE OR MORE SAFETY AGENCIES SUCH AS UL, VDE, CSA AND/OR TUV. ALL ENGINEERING CHANGES MUST HAVE PRIOR APPROVAL BY THE DESIGN CENTER QUALITY DEPARTMENT FOR SAFETY AGENCY COMPLIANCE.	ECN APPROVAL: _____
		QA APPROVAL: _____
		DATE: _____

2.

NOTICE:	THIS IS A RoHS COMPLIANT COMPONENT/PRODUCT. ALL ENGINEERING CHANGES MUST HAVE PRIOR APPROVAL BY THE DESIGN CENTER.
	

3. ELECTRICAL CHARACTERISTICS:

- 3-1. CURRENT RATING: 0.1 AMPERES MAXIMUM
- 3-2. VOLTAGE RATING: 48 VAC MAXIMUM
- 3-3. INSULATION RESISTANCE: 500 MEGOHMS MINIMUM

4. MECHANICAL


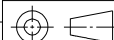
- 4-1. MATING FORCE: 5 POUNDS MAXIMUM WITH LATCH DEPRESSED AT AN ADVANTAGEOUS ANGLE
UNMATING FORCE: 5 POUNDS MAXIMUM WITH LATCH DEPRESSED AT AN ADVANTAGEOUS ANGLE
PLUG RETENTION FORCE: 90N MINIMUM
- 4-2. DURABILITY (MATING/UNMATING): 750 CYCLES
- 4-3. INSERTION FORCE OF PCB RETENTION POSTS: 15 POUNDS MAX
- 4-4. OPERATING TEMPERATURE RANGE: 0 TO +70°C
- 4-5. STORAGE TEMPERATURE RANGE: -40 TO +85°C
- 4-6. SOLDER CONDITION: WAVE SOLDER 265±5°C FOR 10 SECONDS MAX

5. MATERIAL

- 5-1. HOUSING: THERMOPLASTIC UL 94V-0. LCP, BLACK
- 5-2. CONTACT BASE MATERIAL: PHOSPHOR BRONZE
- 5-3. CONTACT UNDERPLATE: 50-90 MICRONS DUCTILE NICKEL
- 5-4. CONTACT PLATING: GOLD, 30 MICRONS MIN IN CONTACT AREA
- 5-5. CONTACT STRUCTURE: SECONDARY BEND
- 5-6. SOLDER TAIL PLATING MATERIAL: 100-200 MICRONS MATTE TIN MIN OVER 50 MICRONS NICKEL, MATTE FINISH
- 5-7. METAL SHIELD: 50-100 MICRONS NICKEL PLATING ON COPPER ALLOY
- 5-8. SHIELD PIN: SOLDER WITH MATTE TIN

6. JACK CAVITY CONFORMS TO FCC RULES AND REGULATIONS PART 68 SUBPART F

- 7. PCB PLATING: EG (TOP PCB)
ENIG (BOTTOM PCB)
- 8. JEDEC MOISTURE: LEVEL 1.
- 9. REVISION: MX1, MX2, ARE PRELIMINARY.

X.	±0.50 [.020]	X ° ± 1°	UNITS mm [INCH]	NAME (INTENDED USE)	 YI HUA COMMUNICATED CONNECTOR CO., LTD.
.X	±0.35 [.014]	.X ° ± 1°	MAT'L	CUSTOMER	
.XX	±0.25 [.010]	.XX ° ± 1°	N/A	PART NO. (INTENDED USE)	TITLE:
.XXX	±0.10 [.004]	.XXX ° ± 1°	FINISH	JDDD44590046	RJ45 CONNECT W/TRANSFORMER, 1X4, W/LED, 1000Base-T, POE
THESE DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY OF YI HUA COMMUNICATED CONNECTOR CO., LTD. AND SHALL NOT BE REPRODUCED COPIED OR USED IN ANY MANNER WITHOUT THE PRIOR WRITTEN CONSENT OF YI HUA COMMUNICATED CONNECTOR CO., LTD.				APPD: TOPUP.LIU	DWG NO:
Q'TY				CHKD: _____	
N/A				DR: SUNWENQUN	

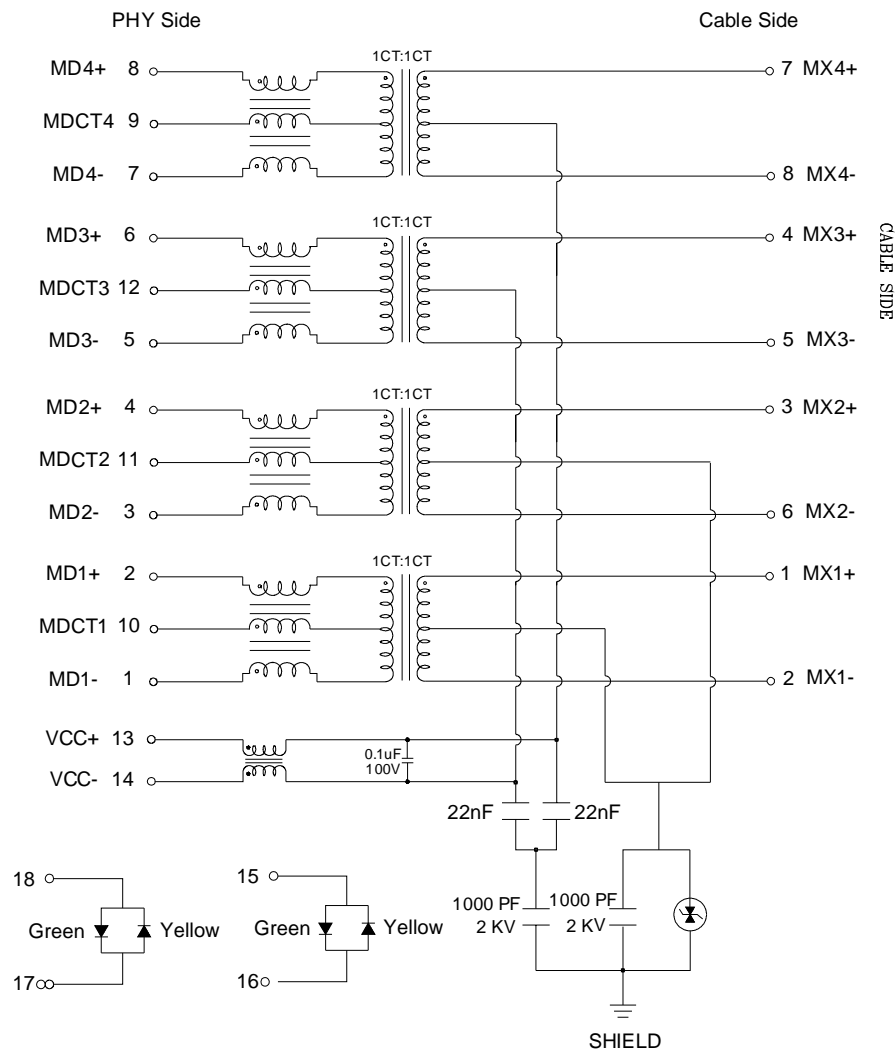
ELECTRICAL CHARACTERISTICS AT +25°C UNLESS OTHERWISE SPECIFIED
(FOR REFERENCE ONLY. USED FOR CUSTOMER INFORMATION.)

- 1-1.Insertion Loss:
 - 1MHz-100MHz -1.0dB MAX.
 - 100MHz-125MHz -1.2dB MAX.
- 1-2.Return Loss:
 - 1MHz-30MHz -18dB MIN.
 - 30MHz-60MHz -14.4dB MIN.
 - 60MHz-80MHz -12dB MIN.
 - 80MHz-100MHz -10dB MIN.
- 1-3.Cross Talk:
 - 1MHz-100MHz -30dB MIN.
- 1-4.Common Mode Rejection:
 - 1MHz-100MHz -25dB MIN.
- 1-5.DC Current/Voltage Rating-PoE
 - 720mA MAX. @57V DC(Continuous)
 - 1.2A MAX. @57V DC For 200 Milliseconds
- 1-6.Primary Inductance: @100KHz,0.1Vrms,8mA DC Bias
 - PHY Side(8-7),(6-5),(4-3),(2-1): 350uH MIN.
- 1-7.Primary Inductance: @100KHz,0.1Vrms,21mA DC Bias, 200uH MIN.
 - Cable Side(7-8),(4-5): 200uH MIN.
- 1-8.Turns Ratio: 100KHz
 - PHY Side(8-7):Cable Side(7-8) = 1:1±3%
 - PHY Side(6-5):Cable Side(4-5) = 1:1±3%
 - PHY Side(4-3):Cable Side(3-6) = 1:1±3%
 - PHY Side(2-1):Cable Side(1-2) = 1:1±3%
- 1-9.Surge protection 6KV
 - Meet 1.2/50 us
 - Meet 8/20 us

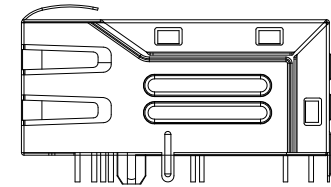
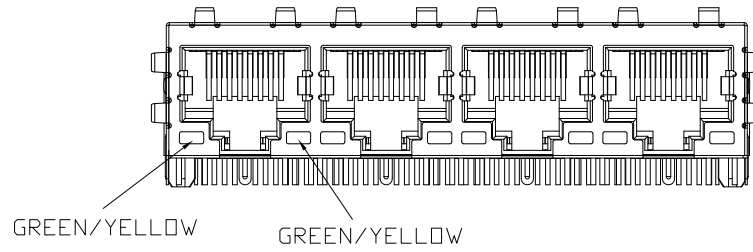
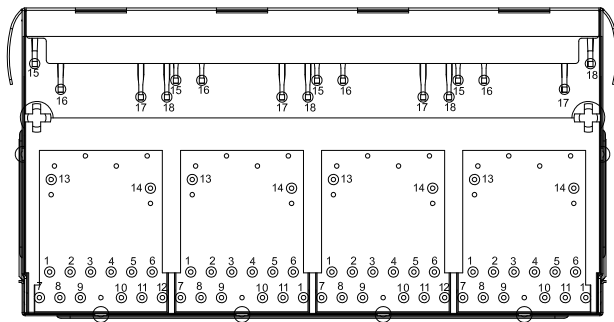
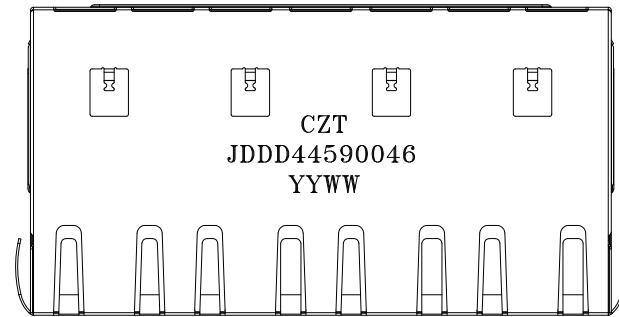
EMMITTED COLOR	GREEN	YELLOW
WAVELENGTH (nm)	565 nM	585 nM
BRIGHNESS (mCD)	6 TO 8TYP @ 20mA	5 TO 7TYP @ 20mA
VIEWING ANGLE	100°	100°
POWER DISSIPATION (Pd)	85 mW MAX	85 mW MAX
DC FORWARD CURRENT	150 mA MAX	150 mA MAX
REVERSE VOLTAGE (Vr)	5.0 V MAX	5.0 V MAX

NOTE: PER VENDOR'S SPECIFICATIONS

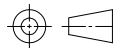
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.XX ±0.25 [.010]	.XX .° ± 1°	N/A	PART NO.(INTENDED USE)	TITLE: RJ45 CONNECT W/TRANSFORMER, 1X4,W/LED,1000Base-T,PDE						
.XXX ±0.10 [.004]	.XXX .° ± 1°	FINISH	JDDD44590046	DWG NO.:						
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			CHKD:							
			DR: SUNWENQUN							
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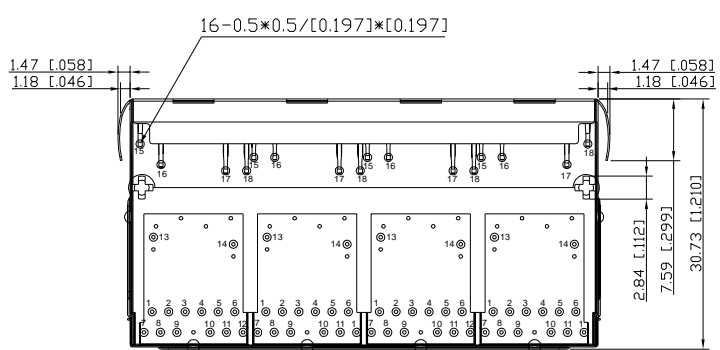
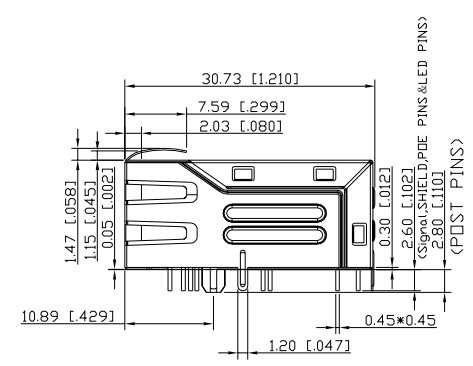
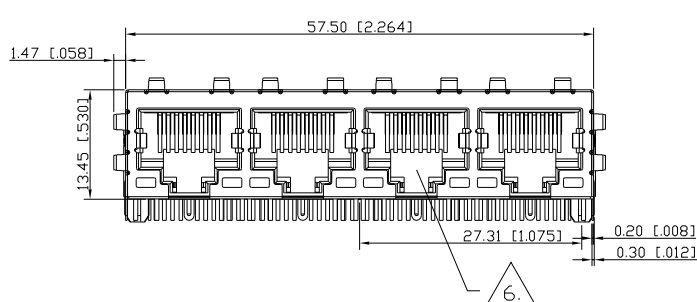
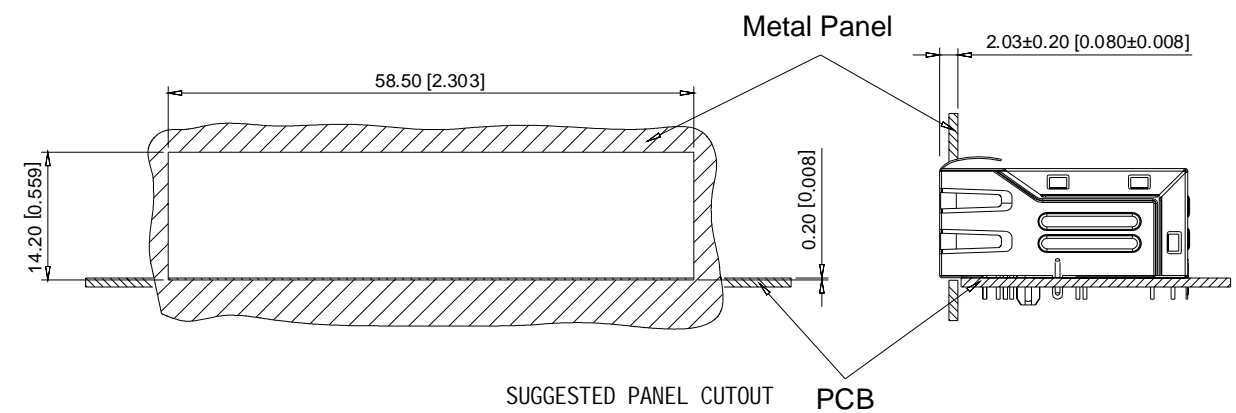
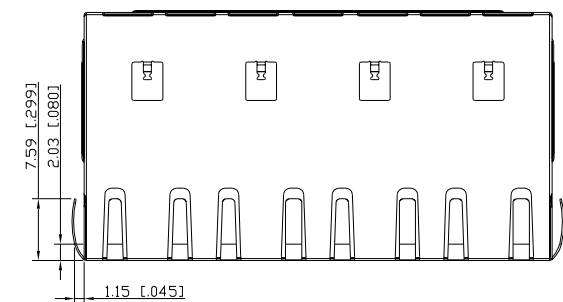


SCHEMATIC(EACH PORT)

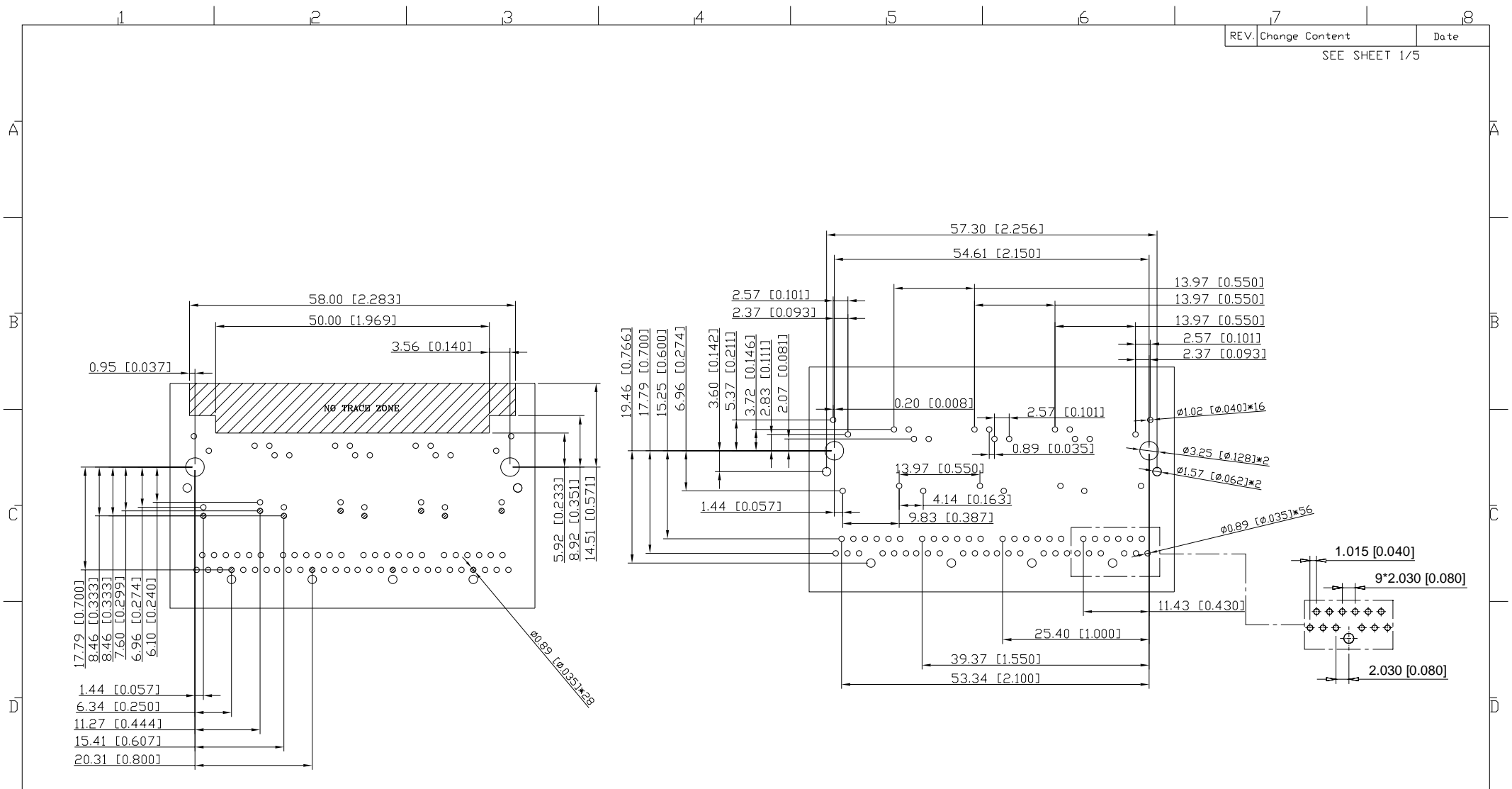


FINAL OUTLINE

X.	± 0.50 [.020]	$X^\circ \pm 1^\circ$	UNITS mm [INCH]	NAME (INTENDED USE)	CZT YI HUA COMMUNICATED CONNECTOR CO., LTD.
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				Q'TY	N/A
				DR: SUNWENQUN	
				SCALE	SHEET
				N/A	3/5
				REV.	B



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.XX	±0.25 [.010]	.XX ° ± 1°	FINISH	N/A	PART NO. (INTENDED USE)	TITLE: RJ45 CONNECT W/T TRANSFORMER, 1X4, W/LED, 1000Base-T, POE	
.XXX	±0.10 [.004]	.XXX ° ± 1°	Q'TY	N/A	APPD: TOPUP.LIU	DWG NO.:	
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						DR: SUNWENQUN	



RECOMMENDED PCB LAYOUT
(VIEWED FROM COMPENENT SIDE)

X. ±0.25 [0.010]	X .° ± 1°	UNITS mm [INCH]	NAME (INTENDED USE)	CZT YI HUA COMMUNICATED CONNECTOR CO., LTD.						
.X ±0.10 [0.004]	.X .° ± 1°	MAT'L	CUSTOMER							
.XX ±0.05 [0.002]	.XX° ± 1°	N/A	PART NO. (INTENDED USE)	TITLE: RJ45 CONNECT W/TRANSFORMER, 1X4,W/LED,1000Base-T,PDE						
.XXX ±0.03 [0.001]	.XXX° ± 1°	FINISH	JDDD44590046	DWG NO.:						
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