

REV.	Change Content	Date
A	Initial Release	OCT.19.2019
B	Updated Content	OCT.23.2019
C	Updated LED	JAN.17.2020

NOTES: UNLESS OTHERWISE SPECIFIED

1. THIS COMPONENT CONFORMS TO UL60950.

	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.

	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 VDC MAXIMUM
3-3. INSULATION RESISTANCE: 500 MEGOHMS MINIMUM
3-4. DIELECTRIC WITHSTANDING VOLTAGE: 2250 VDC CONTACT TO SHIELD

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: 10 POUNDS 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. PA66, BLACK
5-2. CONTACT BASE MATERIAL: PHOSPHOR BRONZE
5-3. CONTACT UNDERPLATE: 50-90 MICROINCHES DUCTILE NICKEL
5-4. CONTACT PLATING: GOLD, 30 MICROINCHES MIN IN CONTACT AREA
5-5. CONTACT STRUCTURE: SECONDARY BEND
5-6. SOLDER TAIL PLATING MATERIAL: 100-200 MICROINCHES MATTE TIN MIN OVER 50 MICROINCHES NICKEL, MATTE FINISH
5-7. METAL SHIELD: 50-100 MICROINCHES NICKEL PLATING ON COPPER ALLOY
5-8. SHIELD PIN: SOLDER WITH MATTE TIN

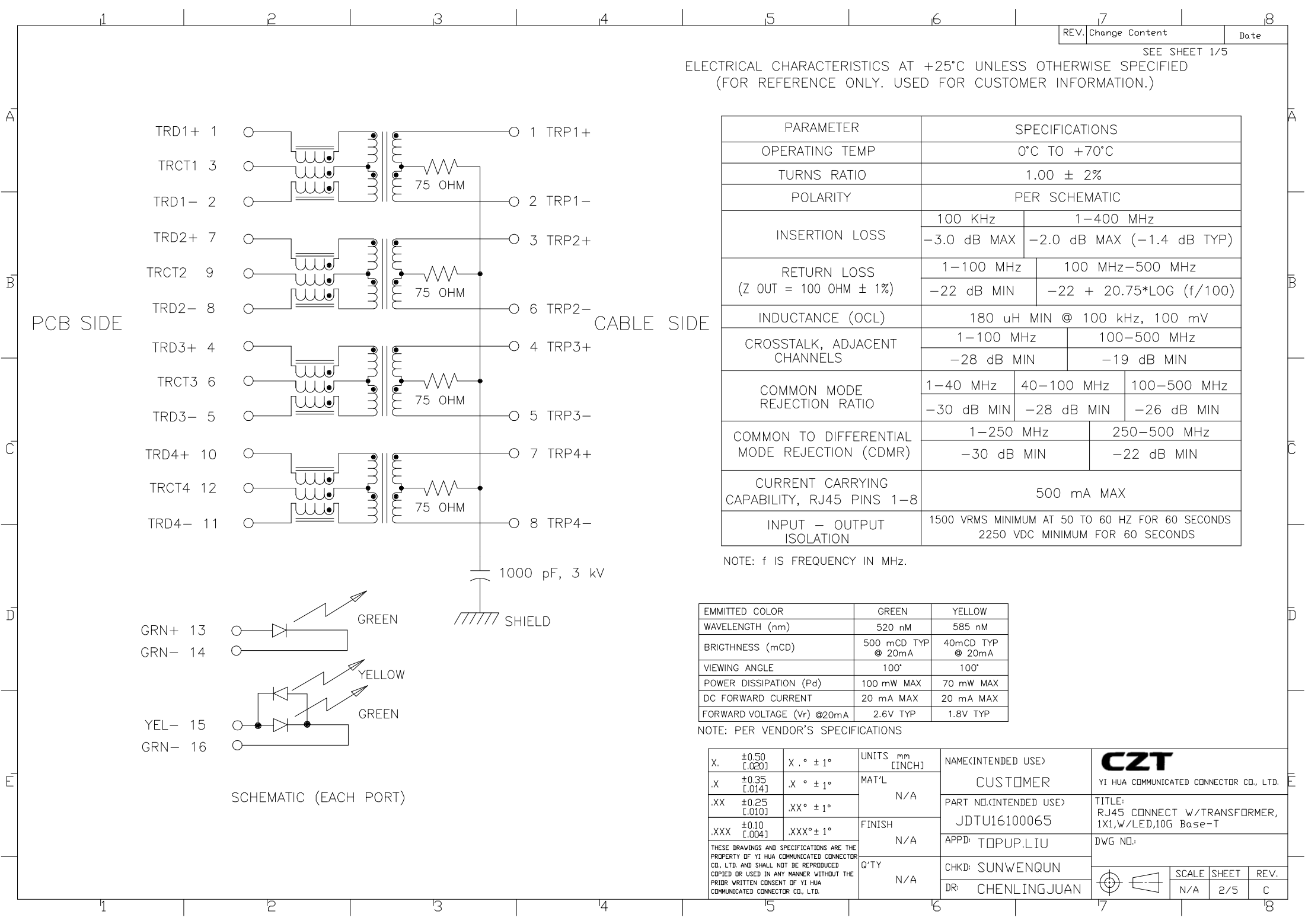
6. JACK CAVITY CONFORMS TO FCC RULES AND REGULATIONS PART 68 SUBPART F

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 N/A	CUSTOMER			
.XX	±0.25 [.010]	.XX° ±1°	FINISH N/A	PART NO.(INTENDED USE) JDTU16100065	TITLE: RJ45 CONNECT W/TRANSFORMER, 1X1,W/LED,10G Base-T		
.XXX	±0.10 [.004]	.XXX° ±1°		APPD: TOPUP.LIU	DWG NO.:		
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.				Q'TY N/A	CHKD: SUNWENQUN	 	
				DR: CHENLINGJUAN	DR: CHENLINGJUAN		



SEE SHEET 1/5
ELECTRICAL CHARACTERISTICS AT +25°C UNLESS OTHERWISE SPECIFIED
(FOR REFERENCE ONLY. USED FOR CUSTOMER INFORMATION.)

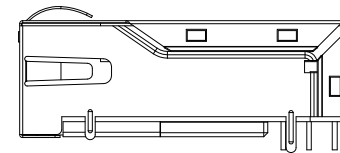
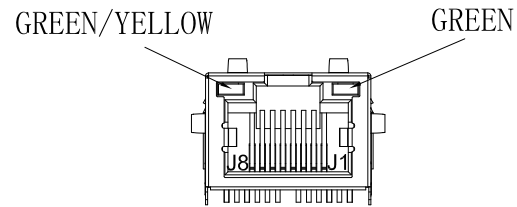
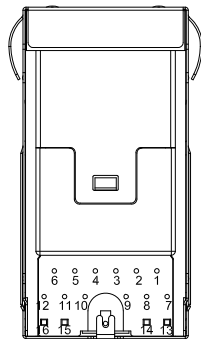
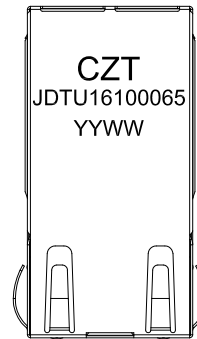
PARAMETER	SPECIFICATIONS		
OPERATING TEMP	0°C TO +70°C		
TURNS RATIO	1.00 ± 2%		
POLARITY	PER SCHEMATIC		
INSERTION LOSS	100 KHz	1–400 MHz	
	–3.0 dB MAX	–2.0 dB MAX (–1.4 dB TYP)	
RETURN LOSS (Z OUT = 100 OHM ± 1%)	1–100 MHz	100 MHz–500 MHz	
	–22 dB MIN	–22 + 20.75*LOG (f/100)	
INDUCTANCE (OCL)	180 uH MIN @ 100 kHz, 100 mV		
CROSSTALK, ADJACENT CHANNELS	1–100 MHz	100–500 MHz	
	–28 dB MIN	–19 dB MIN	
COMMON MODE REJECTION RATIO	1–40 MHz	40–100 MHz	100–500 MHz
	–30 dB MIN	–28 dB MIN	–26 dB MIN
COMMON TO DIFFERENTIAL MODE REJECTION (CDMR)	1–250 MHz		250–500 MHz
	–30 dB MIN		–22 dB MIN
CURRENT CARRYING CAPABILITY, RJ45 PINS 1–8	500 mA MAX		
INPUT – OUTPUT ISOLATION	1500 VRMS MINIMUM AT 50 TO 60 HZ FOR 60 SECONDS 2250 VDC MINIMUM FOR 60 SECONDS		

NOTE: f IS FREQUENCY IN MHZ.

EMMITTED COLOR	GREEN	YELLOW
WAVELENGTH (nm)	520 nm	585 nm
BRIGHTNESS (mCD)	500 mCD TYP @ 20mA	40mCD TYP @ 20mA
VIEWING ANGLE	100°	100°
POWER DISSIPATION (Pd)	100 mW MAX	70 mW MAX
DC FORWARD CURRENT	20 mA MAX	20 mA MAX
FORWARD VOLTAGE (Vr) @20mA	2.6V TYP	1.8V TYP

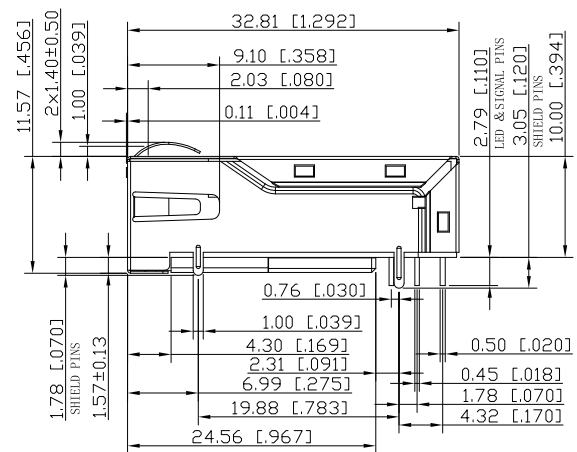
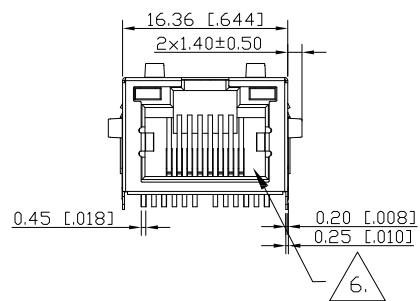
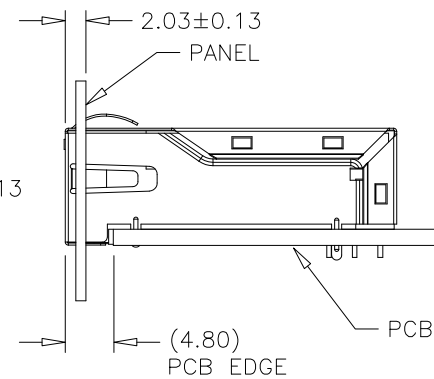
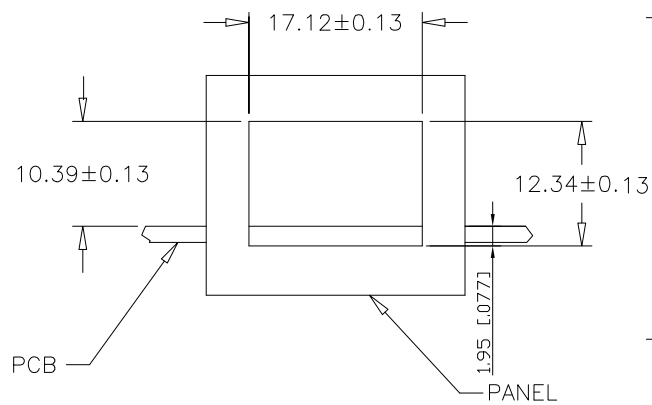
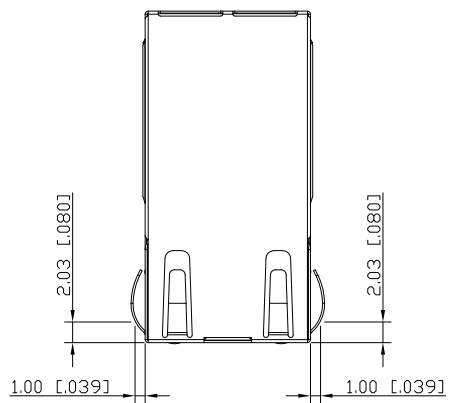
NOTE: PER VENDOR'S SPECIFICATIONS

X.	±0.50 [.020]	X ° ± 1°	UNITS mm [INCH]	NAME<INTENDED USE>	CZT 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: RJ45 CONNECT W/TRANSFORMER, 1X1,W/LED,10G Base-T		
.XXX	±0.10 [.004]	.XXX° ± 1°	FINISH	JDTU16100065			
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.			N/A	APPD: TOPUP.LIU	DWG NO.:		
			Q'TY	CHKD: SUNWENQUN			
			N/A	DR: CHENLINGJUAN		SCALE	SHEET
					N/A	2/5	C



X.	±0.50 [.020]	X .° ± 1°	UNITS mm [INCH]	NAME<INTENDED USE>	CZT YI HUA COMMUNICATED CONNECTOR CO., LTD.								
.X	±0.35 [.014]	.X .° ± 1°	MAT'L N/A	CUSTOMER									
.XX	±0.25 [.010]	.XX° ± 1°	FINISH N/A	PART NO.<INTENDED USE>	TITLE:								
.XXX	±0.10 [.004]	.XXX° ± 1°		JDTU16100065	RJ45 CONNECT W/TRANSFORMER, 1X1,W/LED,10G Base-T								
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				CHKD: SUNWENQUN	 <table><tr><td>SCALE</td><td>SHEET</td><td>REV.</td></tr><tr><td>N/A</td><td>3/5</td><td>C</td></tr></table>			SCALE	SHEET	REV.	N/A	3/5	C
				SCALE				SHEET	REV.				
N/A	3/5	C											
Q'TY N/A	DR: CHENLINGJUAN												

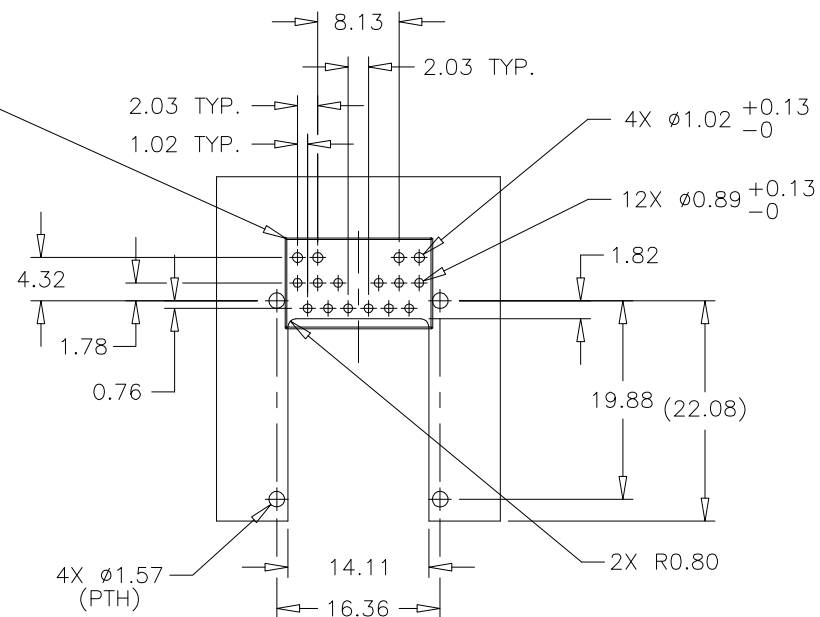
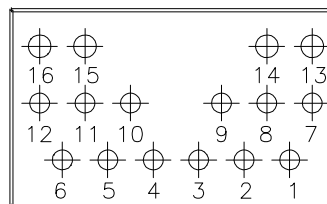
SEE SHEET 1/5



X.	±0.50 [.020]	X . ° ± 1°	UNITS mm [INCH]	NAME(INTENDED USE)	CZT			
.X	±0.35 [.014]	.X ° ± 1°	MAT'L	CUSTOMER	YI HUA COMMUNICATED CONNECTOR CO., LTD.			
.XX	±0.25 [.010]	.XX ° ± 1°	N/A	PART NO.(INTENDED USE)	TITLE:			
.XXX	±0.10 [.004]	.XXX ° ± 1°	FINISH	JDTU16100065	RJ45 CONNECT W/TRANSFORMER, 1X1,W/LED,10G Base-T			
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			Q'TY	CHKD: SUNWENQUN				
			N/A	DR: CHENLINGJUAN				
					SCALE	SHEET	REV.	
					N/A	4/5	C	

PIN ASSIGNMENT

- 1 TD1+
- 2 TD1-
- 3 TCT1
- 4 TD3+
- 5 TD3-
- 6 TCT3
- 7 TD2+
- 8 TD2-
- 9 TCT2
- 10 TD4+
- 11 TD4-
- 12 TCT4
- 13 RIGHT GRN+
- 14 RIGHT GRN-
- 15 LEFT YEL-
- 16 LEFT GRN-



RECOMMENDED PCB LAYOUT (VIEWED FROM COMPONENT SIDE)

X.	±0.25 [.010]	X ° ±1°	UNITS mm [INCH]	NAME(INTENDED USE)	CZT YI HUA COMMUNICATED CONNECTOR CO., LTD.
.X	±0.10 [.004]	X ° ±1°	MAT'L	CUSTOMER	
.XX	±0.05 [.002]	.XX ° ±1°	N/A	PART NO.(INTENDED USE)	TITLE: RJ45 CONNECT W/TRANSFORMER, 1X1,W/LED,10G Base-T
.XXX	±0.03 [.001]	.XXX ° ±1°	FINISH	JDTU16100065	
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				CHKD: SUNWENQUN	
				DR: CHENLINGJUAN	
					SCALE SHEET REV. N/A 5/5 C