

REV.	Change Content	Date
A	Initial Release	APR.22.2019
B	Change The Circuit Schematic	AUG.09.2019

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:

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

3. ELECTRICAL CHARACTERISTICS:

- 3-1. VOLTAGE RATING: 60 VDC MAXIMUM
 3-2. INSULATION RESISTANCE: 500 MEGOHMS MINIMUM
 3-3. RATED CURRENT: 1500mA MAXIMUM (POE)

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: 20 POUNDS MINIMUM
 4-2. DURABILITY (MATING/UNMATING): 750 CYCLES
 4-3. INSERTION FORCE OF PCB RETENTION POSTS: 15 POUNDS MAX
 4-4. CONTACT RESISTANCE: 30 mOHMS
 4-5. NORMAL FORCE: 100 GRAM FORCE MINIMUM PER FCC PART 68.
 4-6. OPERATING TEMPERATURE RANGE: -40 TO +85°C
 4-7. STORAGE TEMPERATURE RANGE: -50 TO +125°C
 4-8. COMPLIANCE TO J-STD:
 A. J-STD-002: SOLDERABILITY AT 245°C REFLOW PROFILE
 B. J-STD-020: LEVEL 1, NO MOISTURE SENSITIVE
 C. J-STD-075: W7, 270°C MAXIMUM THROUGH WAVE SOLDER
 D. J-STD-075: R4, 260°C MAXIMUM THROUGH REFLOW SOLDER

5. MATERIAL

- 5-1. HOUSING: THERMOPLASTIC UL 94V-0, 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: TIN DIPPING

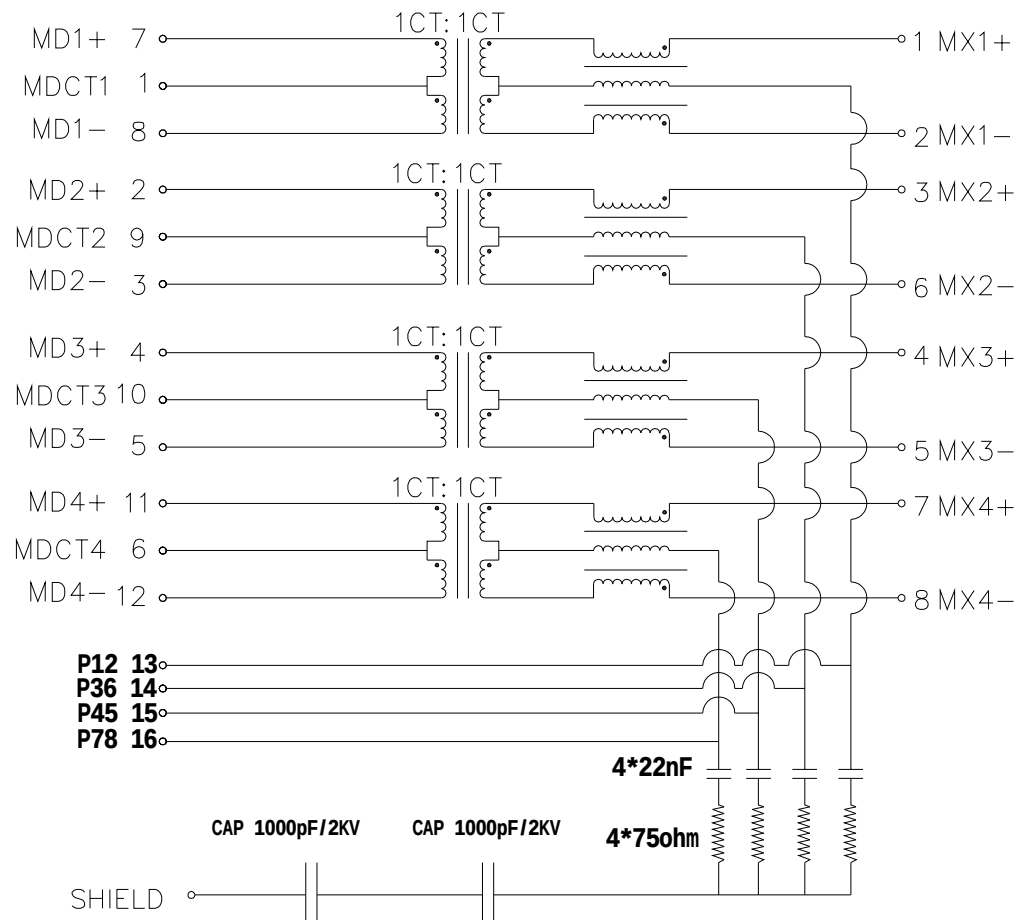
6. JACK CAVITY CONFORMS TO FCC RULES AND REGULATIONS PART 68 SUBPART F

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)	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, 1X2, W/O LED, 10G Base-T
.XXX	±0.10 [.004]	.XXX ° ± 1°	FINISH	JDTA20080000	
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.:
				CHKD: SUNWENQUN	
				DR:	 
					SCALE: N/A SHEET: 1/5 REV.: B



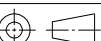
SCHEMATIC (EACH PORT)

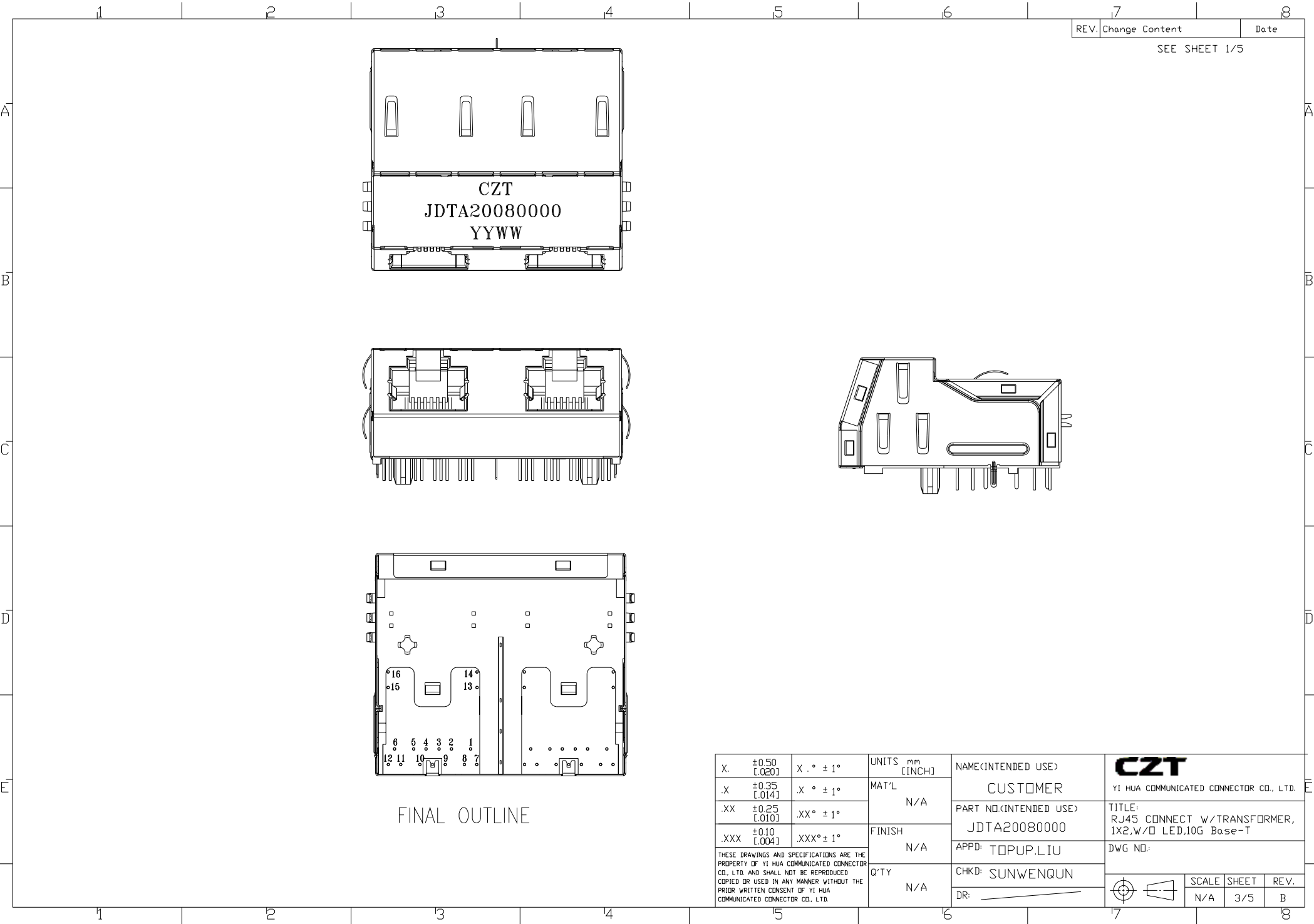
ELECTRICAL CHARACTERISTICS AT +25°C UNLESS OTHER SPECIFIED

PARAMETER	SPECIFICATIONS				
URNS RATIO	1.00 ± 2%				
POLARITY	PER SCHEMATIC				
TEMPERATURE RISE ON COMPONENT SHIELD	30°C MAX,WITH 1500mA MAX POE CURRENT				
INSERTION LOSS	0.1-1 MHz	1-65 MHz	65-125 MHz	125-400 MHz	400-500 MHz
	-1.5 dB MAX	-0.5 dB MAX	-0.8 dB MAX	-2.2 dB MAX	-4.5 dB MAX
RETURN LOSS (Z OUT=100 OHM ±15%)	1-100 MHz	100-200 MHz		200-300 MHz	300-400 MHz
	-22 dB MIN	-24+20.75log(f/100)dB MIN		-12 dB MIN	-9.5 dB MIN
INDUCTANCE (OCL)	120 uH MIN @ 100KHz,100mV 19 mA 38mA Iunb				
CROSSTALK, ADJACENT CHANNELS PORT 1 (min) WITHOUT FCC	1-100 MHz	100-400 MHz		400-500 MHz	
	-47 dB MIN	-37 dB MIN		-30 dB MIN	
CROSSTALK, ADJACENT CHANNELS WITH FCC	1-100 MHz	100-400 MHz		400-500 MHz	
	-30 dB MIN	-22 dB MIN		-20 dB MIN	
CROSSTALK, ADJACENT CHANNELS PORT 1 (min)	1-100 MHz			100-500 MHz	
	-70+10log(f/100)			-70+15log(f/100)	
COMMON MODE REJECTION RATIO	1-100MHZ		100-300MHZ		300-500MHZ
	-30 dB MIN		-25 dB MIN		-20 dB MIN
COMMON TO DIFFERENTIAL MODE REJECTION (CDMR)	1-100MHz		100-300MHz		300-500MHz
	-35dB MIN		-30dB MIN		-25dB MIN
MAXIMUM CONTINUOUS POE CURRENT,PER TWISTED PAIR	1500 mA MAX				
INPUT - OUTPUT ISOLATION	2250 VDC MINIMUM FOR 60 SECONDS				

NOTE: f IS FREQUENCY IN MHZ.

1. SURGE PROTECTION: LINE TO GROUND: 6KV 3KA

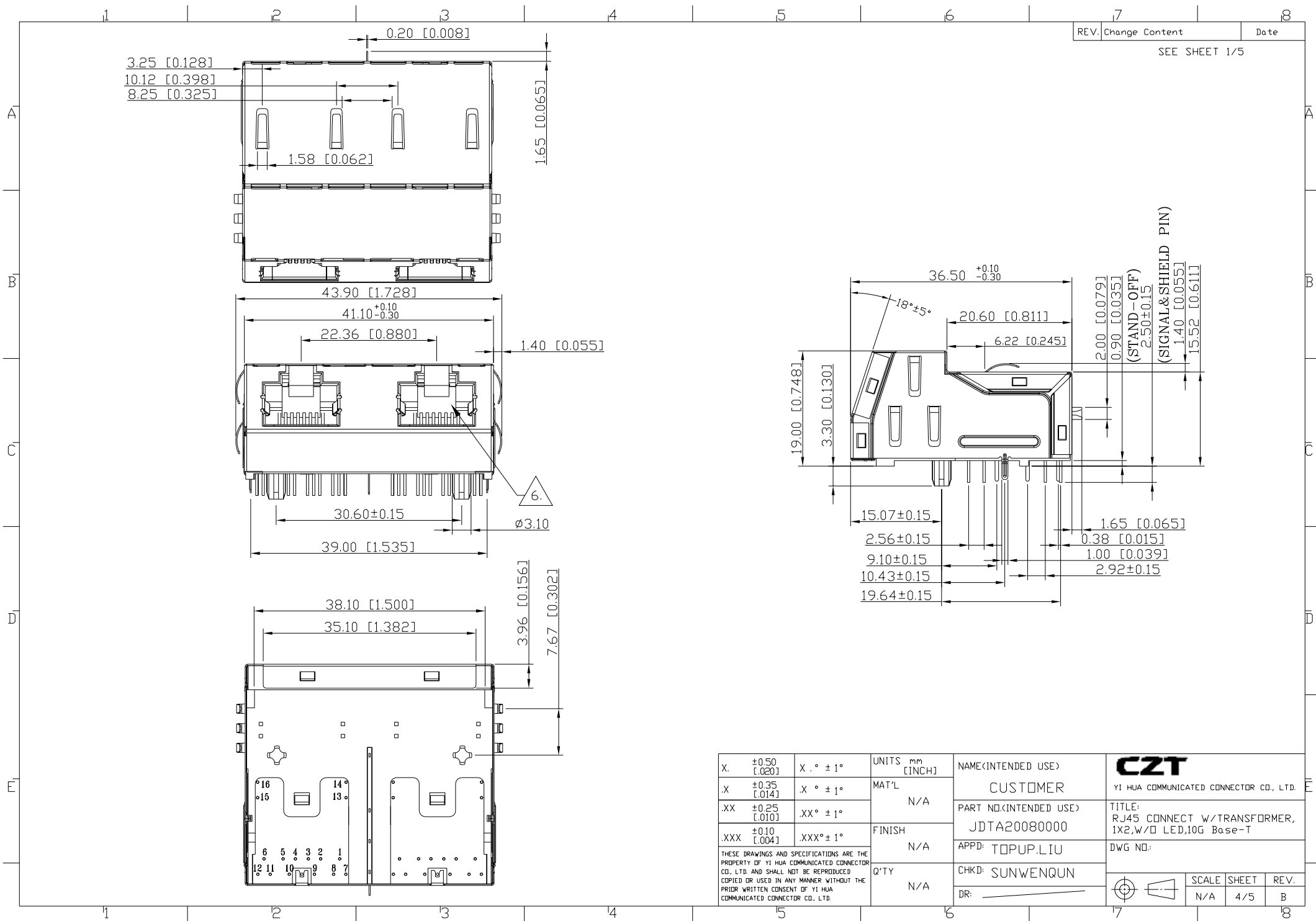
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XX	±0.25 [.010]	XX° ±1°	N/A	PART NO. (INTENDED USE)	TITLE: RJ45 CONNECT W/TRANSFORMER, 1X2,W/O LED,10G Base-T
XXX	±0.10 [.004]	XXX° ±1°	FINISH	JDTA20080000	
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			Q'TY	CHKD: SUNWENQUN	
			N/A	DR: _____	
					SHEET
					REV.
					N/A
					2/5
					B



REV.	Change Content	Date
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SEE SHEET 1/5

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:			
.XXX	±0.10 [.004]	.XXX° ± 1°	FINISH	JDTA20080000	RJ45 CONNECT W/T TRANSFORMER, 1X2,W/O LED,10G Base-T			
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				Q'TY	CHKD: SUNWENQUN			
				N/A	DR: _____			
						SCALE	SHEET	REV.
						N/A	3/5	B



PIN ASSIGNMENT

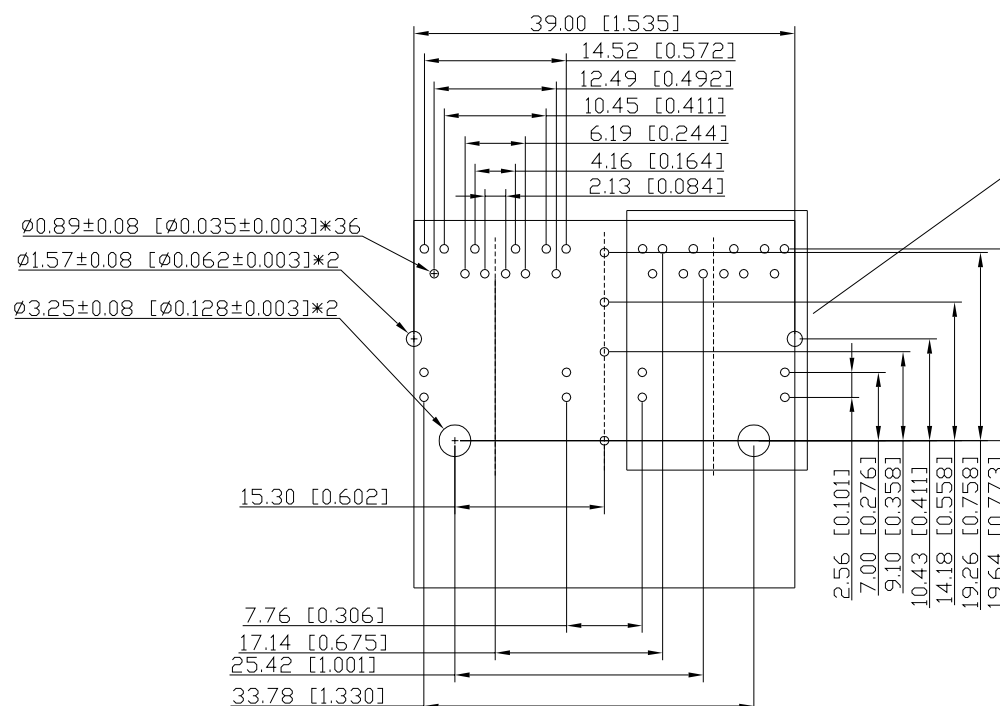
1 MDCT1
2 MD2+
3 MD2-
4 MD3+
5 MD3-
6 MDCT4
7 MD1+
8 MD1-
9 MDCT2
10 MDCT3
11 MD4+
12 MD4-
13 P12
14 P36
15 P45
16 P78

12 11 10 9 8 7
○ ○ ○ ○ ○ ○
○ ○ ○ ○ ○ ○
6 5 4 3 2 1

○ P15 P13 ○

○ P16 P14 ○

PIN ASSIGNMENT, EACH PORT
VIEWED FROM COMPONENT SIDE
(ONLY RIGHTMOST PORT SHOWN)



RECOMMENDED PCB LAYOUT
(VIEWED FROM COMPERNENT 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, 1X2, W/O LED, 10G Base-T
.XXX ±0.03 [.001]	.XXX ° ±1°	FINISH	JDTA20080000	
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			Q'TY	
			N/A	
			CHKD: SUNWENQUN	
			DR: _____	
				SCALE SHEET REV.
				N/A 5/5 B