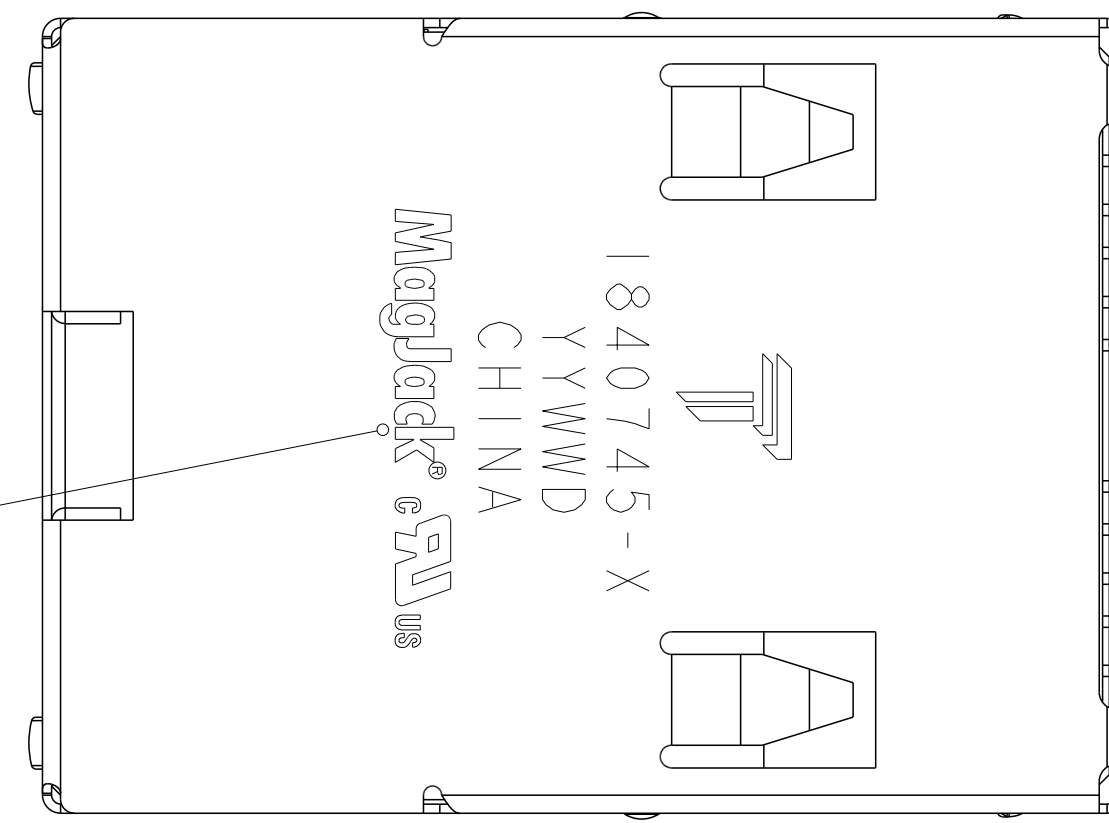
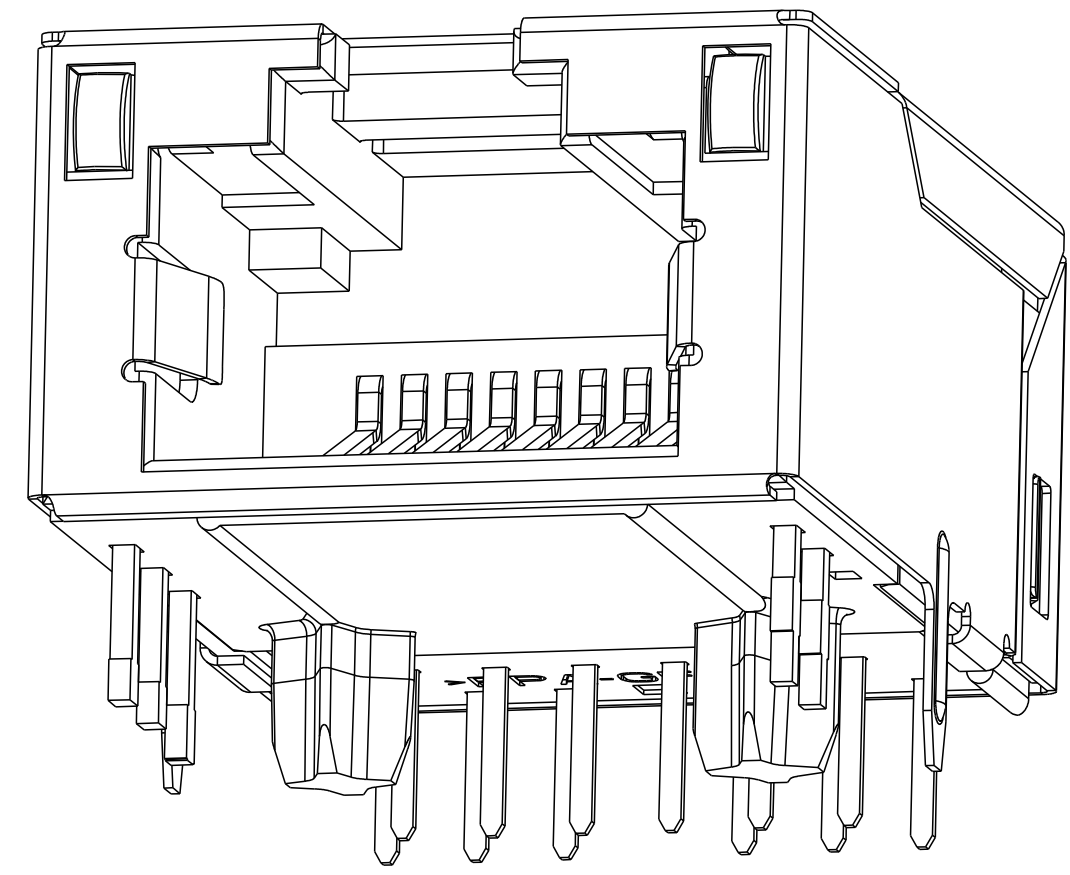


THIS DRAWING AND THE SUBJECT MATTER SHOWN THEREON ARE CONFIDENTIAL AND THE PROPERTY OF BEL/STEWART/TRP CONNECTOR AND SHALL NOT BE REPRODUCED, COPIED, OR USED IN ANY MANNER WITHOUT THE WRITTEN CONSENT OF TRP CONNECTOR.

PRODUCT MAY BE PROTECTED BY ONE OR MORE OF THE FOLLOWING US PATENTS:  
 5736910 5939955 6425781 6428361 6554638 6840817 7123117  
 7429195 7717749 7808751 6217391 6149050 7924130

REVISIONS				
P	LTN	DESCRIPTION	DATE	OWN APVD
K	EC-1404007		14APR2014	THS TY
L	REVISED PER EC-1411039		11NOV2014	TYR TYN
M	EC-1411035 COMPANY LOGO CHANGE		25DEC2014	TYR TYN



- MATERIALS:**  
 -HOUSING: HIGH TEMPERATURE NYLON, BLACK, UL 94V-0  
 -SHIELD: 0.20mm THICK, BRASS PREPLATED WITH 1.27um MIN SEMI-BRIGHT NICKEL; POST-DIPPED WITH 2um MIN LEAD FREE TIN SOLDER  
 -CONTACT TAILS: 0.25mm THICK, PHOSPHOR BRONZE, 1.27 um MIN OVERALL NICKEL UNDERPLATE, 3um MIN TIN PLATE  
 -MOD JACK CONTACTS: 0.25mm THICK, PHOSPHOR BRONZE, 1.27 um MIN OVERALL NICKEL UNDERPLATE, WITH 0.76um (1.27um SELECTIVE) MIN LOCALIZED GOLD PLATE AT PLUG INTERFACE  
 -LIGHT EMITTING DIODE (LED): DIFFUSED EPOXY LENS, 0.5mm X 0.5mm CARBON STEEL WIREFRAME LEADS PREPLATED WITH 2.03um MIN. SILVER PLATE OVER 1.02um MIN. NICKEL OVER 1.02um MIN. COPPER UNDERPLATE; LEADS POST-PLATED WITH 3.05um MIN. MATTE TIN.  
 -LIGHT PIPE: POLYCARBONATE

RJ45 JACK CAVITY CONFORMS TO FCC RULES AND REGULATIONS PART 68, SUB-PART F.

- MAGNETICS:**  
 -IMPEDANCE: 100 OHMS  
 -TRANSMIT OPEN CIRCUIT INDUCTANCE (OCL): 350uH (MIN) @100KHz, 0.1 VRMS WITH 8 mA DC BIAS.  
 -TURNS RATIO (CHIP:CABLE): TX 1:1, RX: 1:1  
**PERFORMANCE:**  
 -TRANSMIT BIDIRECTIONAL ALL 4 PAIRS  
 -RECEIVE BIDIRECTIONAL ALL 4 PAIRS

FREQUENCY	INSERTION LOSS (dB MAX)	RETURN LOSS (dB MIN) CIRCUIT IMPEDANCE = 100 OHMS ±15%	COMMON MODE REJECTION RATIO (dB MIN)	CROSSTALK ATTENUATION (dB MIN)
0.5 MHz - 40.0 MHz	1.2	18.0	30	35
40.0 MHz - 100.0 MHz		$12-20 \log(f/80)$ f IS FREQUENCY IN MHZ		$33-20 \log(f/50)$ f IS FREQUENCY IN MHZ

ALL MAGNETIC ELECTRICAL CHARACTERISTICS RATED @ 25°C

**DIELECTRIC (ISOLATION VOLTAGE):**  
 -2250 VDC (1 mA CUTOFF CURRENT) FOR 60 SECONDS DURATION BETWEEN CABLE CONTACTS AND PCB CONTACTS (INCLUDING SHIELD).  
 -1500 VRMS (10 mA CUTOFF CURRENT) FOR 60 SECONDS DURATION BETWEEN CABLE CONTACTS AND PCB CONTACTS (INCLUDING SHIELD).  
 -ALL BRIDGED ON EITHER SIDE OF MAGNETICS PACKAGE FOR RJ-45 CONTACTS.  
 OPERATING TEMPERATURE: FROM 0°C TO +70°C.

- LED IS WITH CONSTANT CURRENT AT APPROX 20mA.  
 LED COLOR: DONINANT WAVELENGTH(λ D), GREEN = 565±5nm TYP. at IF=20mA FORWARD VOLTAGE(VF), GREEN 2.2V TYP. at IF=20mA.  
 DONINANT WAVELENGTH(λ D), YELLOW = 591±5nm TYP. at IF=20mA FORWARD VOLTAGE(VF), YELLOW 2.1V TYP. at IF=20mA.  
 DONINANT WAVELENGTH(λ D), ORANGE = 605±5nm TYP. at IF=20mA FORWARD VOLTAGE(VF), ORANGE 2.1V TYP. at IF=20mA.  
 DONINANT WAVELENGTH(λ D), ULTRA LOW WAVELENGTH GREEN(ULWG) 525nm TYP. at IF=20mA FORWARD VOLTAGE(VF), ULTRA LOW WAVELENGTH GREEN(ULWG) 2.8V TYP. at IF=20mA.

ALL DIMENSIONS NOMINAL UNLESS OTHERWISE NOTED.

RJ45 MOD PLUG SELECTIVE - THIS CONNECTOR UTILIZES STAINLESS STEEL SPRING MEMBER WHICH PREVENTS THE INSERTION OF A RJ11 (6 POSITION) PLUG INTO THE JACK PORT, WHILE ALLOWING A RJ45 (8 POSITION) PLUG TO MATE FREELY.

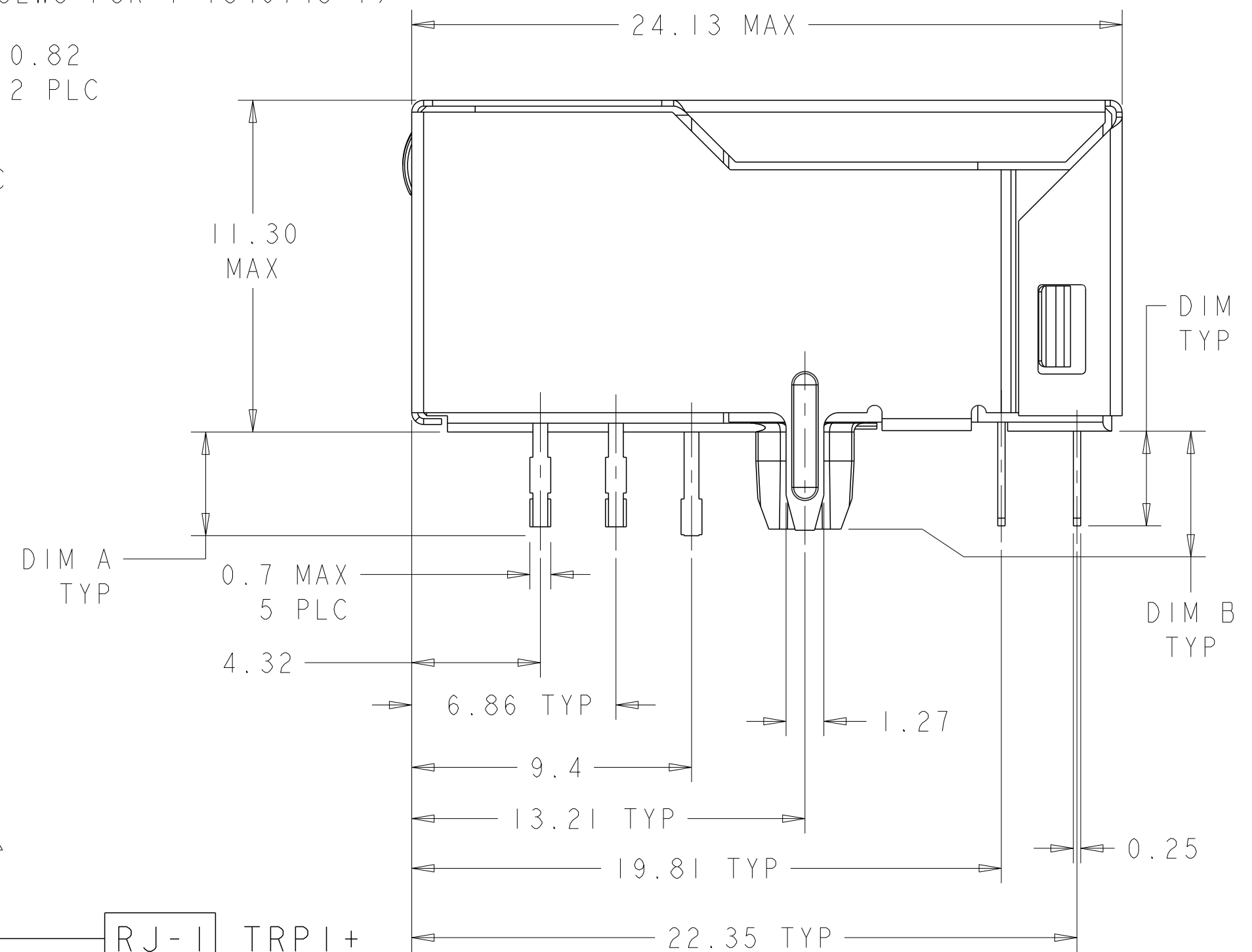
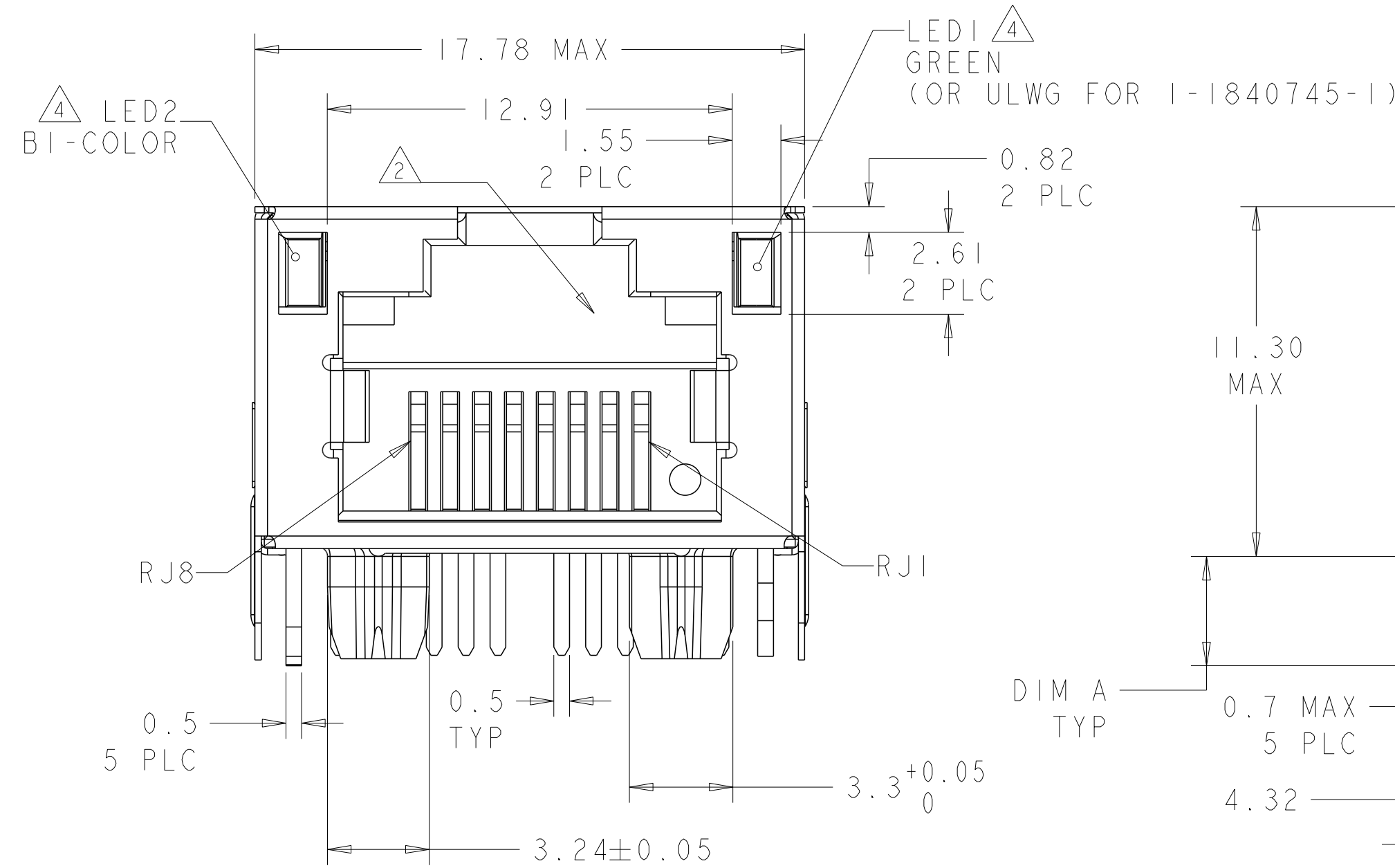
WARNING: THIS FEATURE WAS DEVELOPED FOR TYPICAL PLUG INSERTION FORCES. EXCESSIVE INSERTION FORCE MAY OVERCOME THE SELECTIVE FEATURES AND DAMAGE THE CONNECTOR.

TRP CONNECTOR LOGO, PART NUMBER, DATE CODE, COUNTRY OF ORIGIN AND AGENCY APPROVAL MARKING IN APPROXIMATE LOCATION SHOWN.

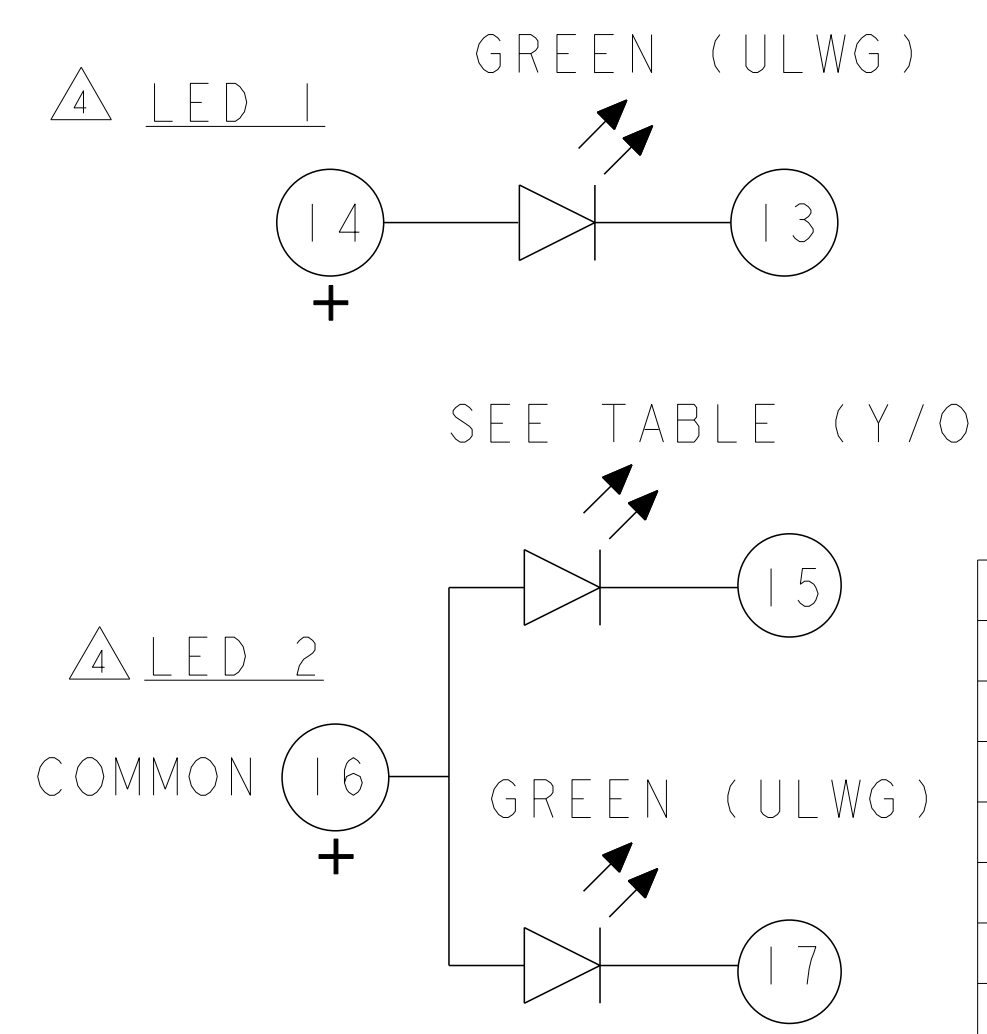
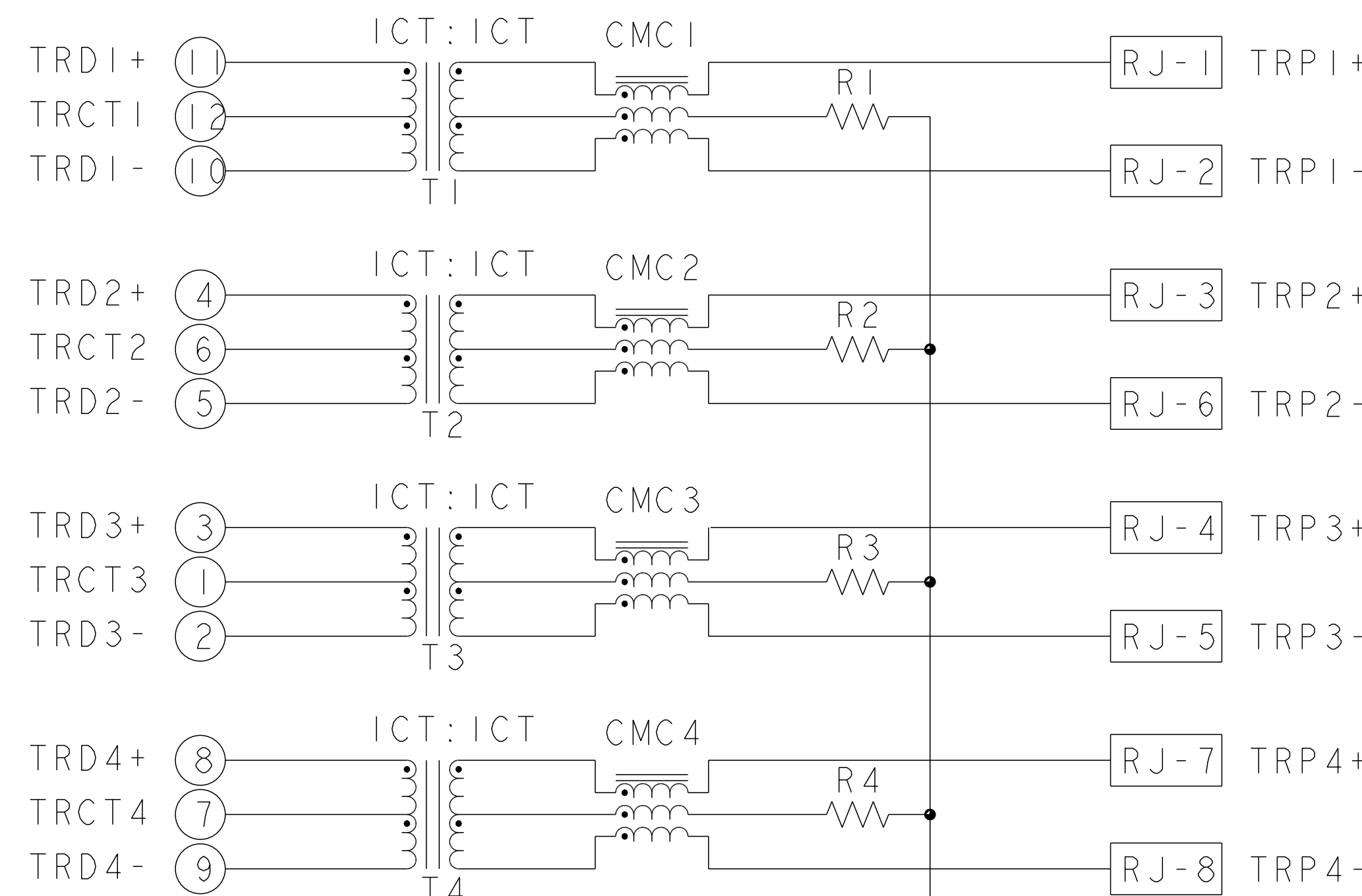
THESE PARTS ARE COMPLIANT TO BOTH WAVE SOLDERING PROCESS, PREHEAT TEMPERATURE IS 120°C TO 160°C, 120 SECONDS TO 180 SECONDS, PEAK SOLDERING TEMPERATURE IS 260 C MAX, 10 SECONDS MAX; AND IR REFLOW SOLDERING PROCESS, PEAK SOLDERING TEMPERATURE 260 C MAX DURATION TIME 10 SECONDS MAX, OVER 230 C WITHIN 40 - 60 SECONDS.

THESE PARTS ARE COMPLIANT TO WAVE SOLDERING PROCESS ONLY, PREHEAT TEMPERATURE IS 120°C TO 160°C, 120 SECONDS TO 180 SECONDS, PEAK SOLDERING TEMPERATURE IS 260 C MAX, 10 SECONDS MAX;

10. 1840745-1 (OR I-1840745-1) SHOWN UNLESS OTHERWISE NOTED



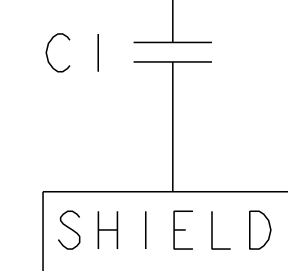
**IG18 GIGABIT CIRCUIT**



TRAY	WAVE	LED 2	LED 1	RJ11 SELECTIVE CAPABILITY	GROUND TABS	DIM B	DIM A	PART NO.	
TRAY	WAVE	0.76um	ULWG/YELLOW	ULWG	NO	NO	3.3	3.18	I-1840745-1
TRAY	WAVE	0.76um	GREEN/YELLOW	GREEN	NO	NO	2.35	2.35	1840745-8
TAPE AND REEL	WAVE	0.76um	GREEN/YELLOW	GREEN	YES	TOP AND SIDES	3.30	3.18	I-1840745-4
TRAY	WAVE	1.27um	GREEN/ORANGE	GREEN	NO	TOP AND SIDES	3.30	3.18	1840745-7
TRAY	WAVE	0.76um	GREEN/YELLOW	GREEN	NO	TOP ONLY	3.30	3.18	1840745-6
TRAY	WAVE	0.76um	GREEN/YELLOW	GREEN	YES	NO	1.8	1.8	1840745-5
TRAY	WAVE	0.76um	GREEN/YELLOW	GREEN	YES	TOP AND SIDES	3.3	3.18	1840745-4
TAPE AND REEL	BOTH	0.76um	GREEN/YELLOW	GREEN	YES	TOP AND SIDES	1.8	1.8	1840745-3
TRAY	WAVE	0.76um	GREEN/YELLOW	GREEN	NO	NO	3.3	3.18	1840745-1

CI : 1000pF, 3KV DECOUPLING CAPACITOR.

R1-R4: 75 OHMS, 1/16W, 5% RESISTORS.



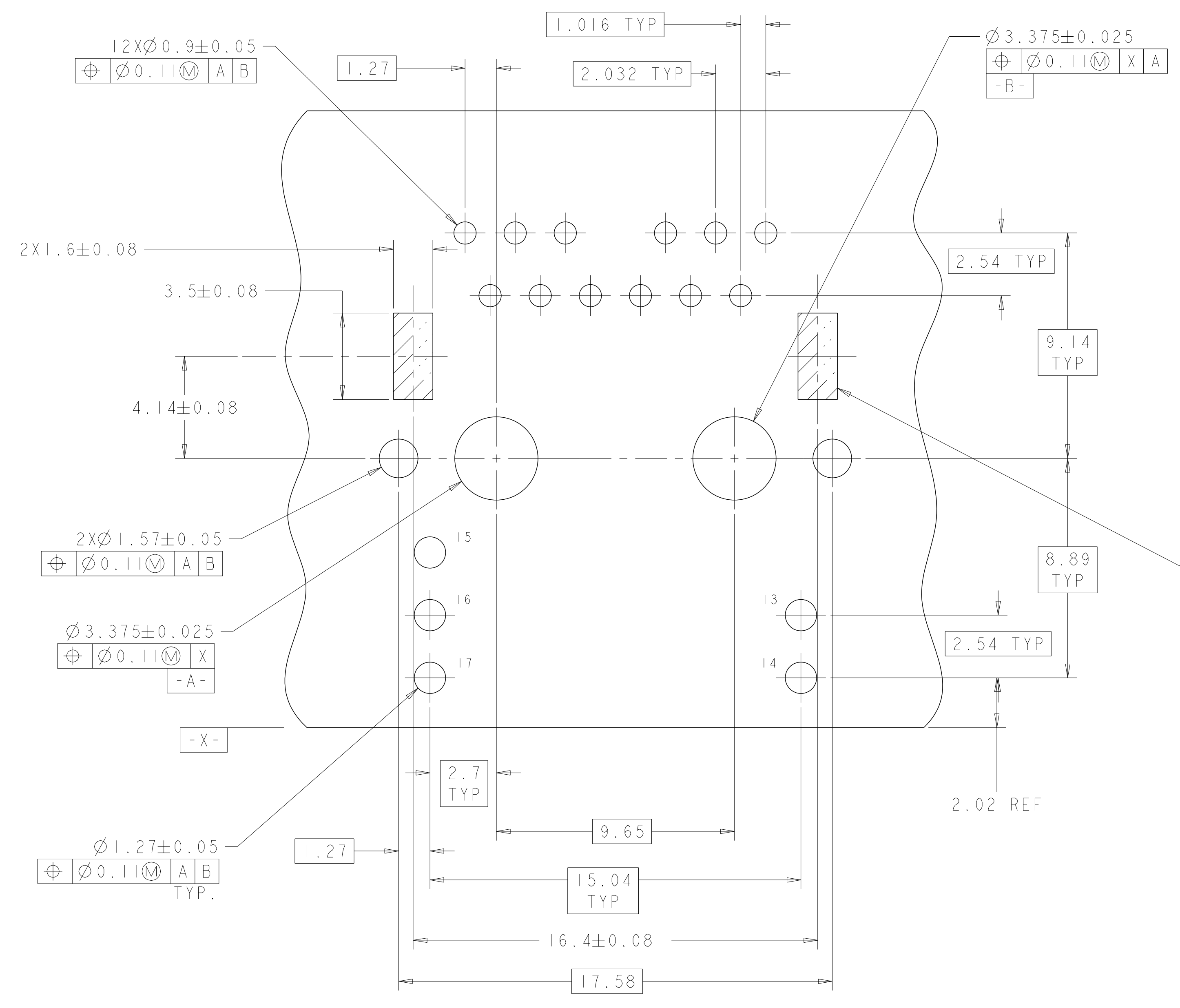
THIS DRAWING IS A CONTROLLED DOCUMENT.

OWN: TOWER YU 180CT2007	CHK: KE LTH ZHU 180CT2007	APVD: TEDDY XIONG 180CT2007
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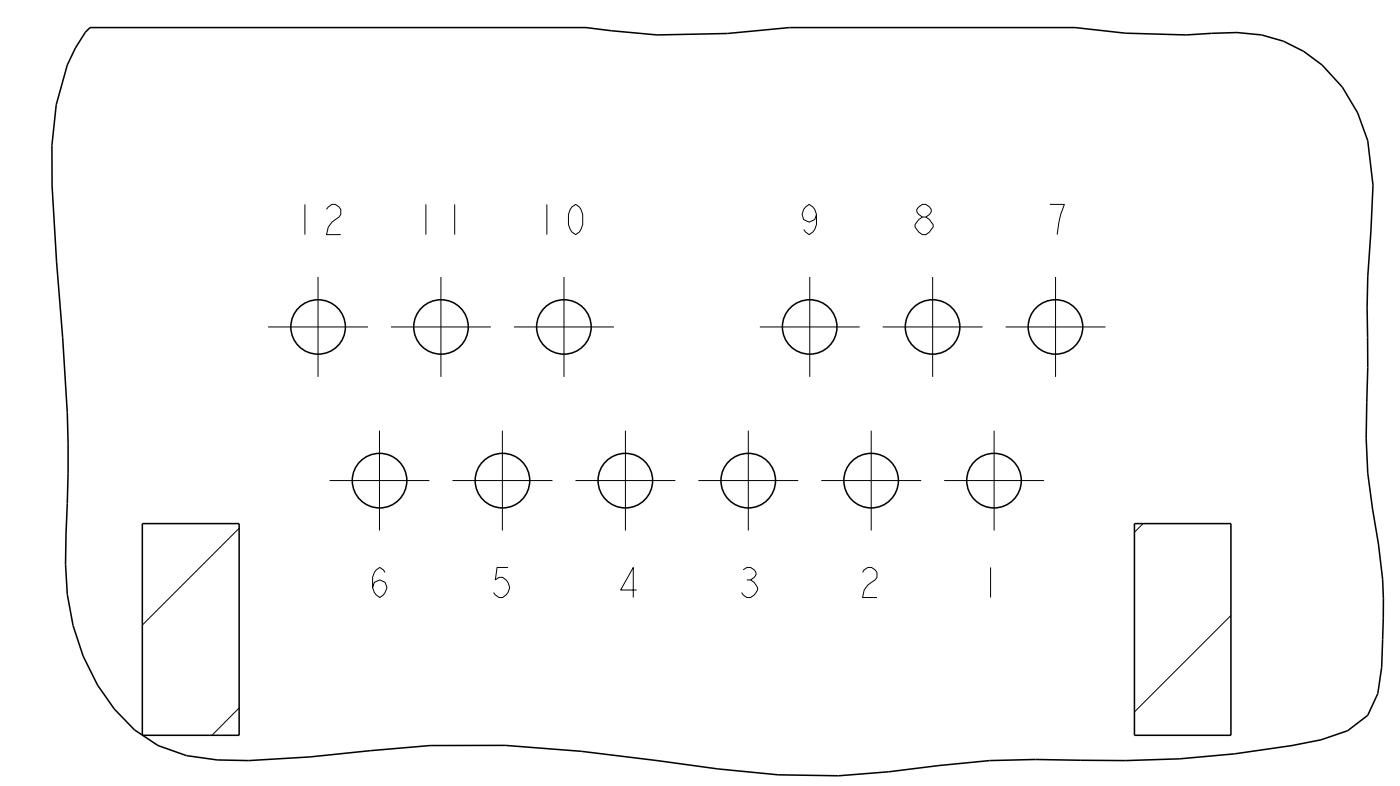
**trp CONNECTOR** DONGGUAN CHINA

MODEL NAME: MAGJACK  
 DESC: IXI IG18 GIGABIT TAB UP LOW PROFILE W/ LED

SIZE: A1  
 SCALE: 4:1

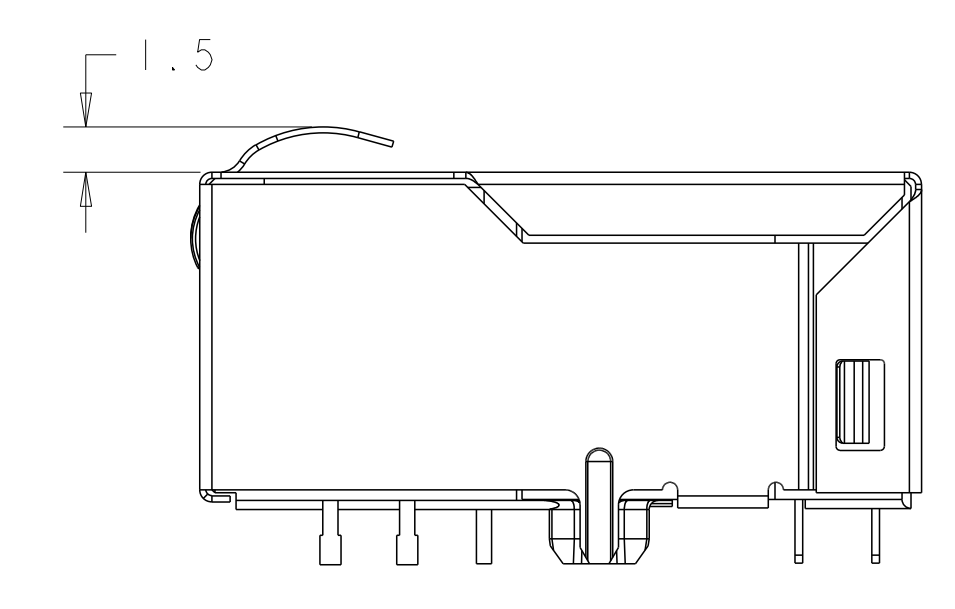


SUGGESTED PCB LAYOUT  
(COMPONENT SIDE)

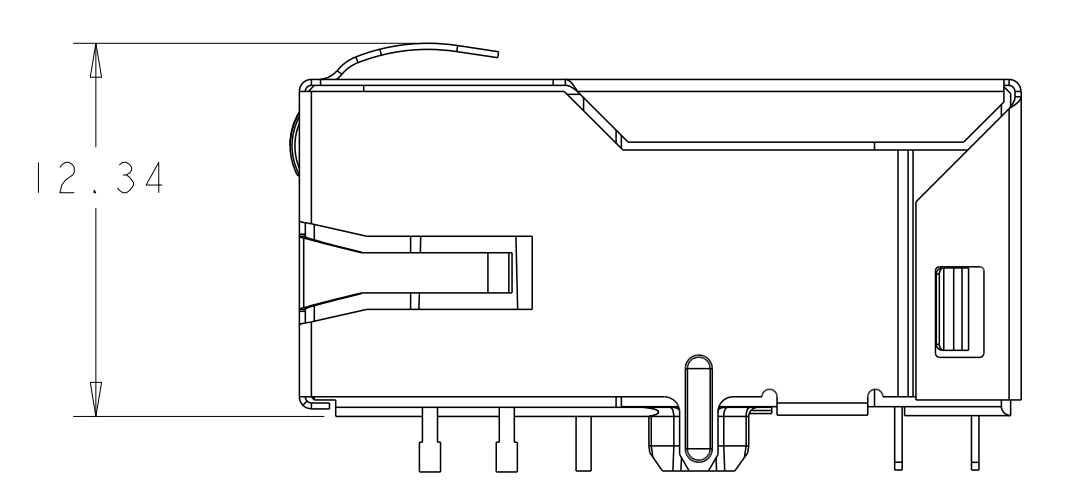
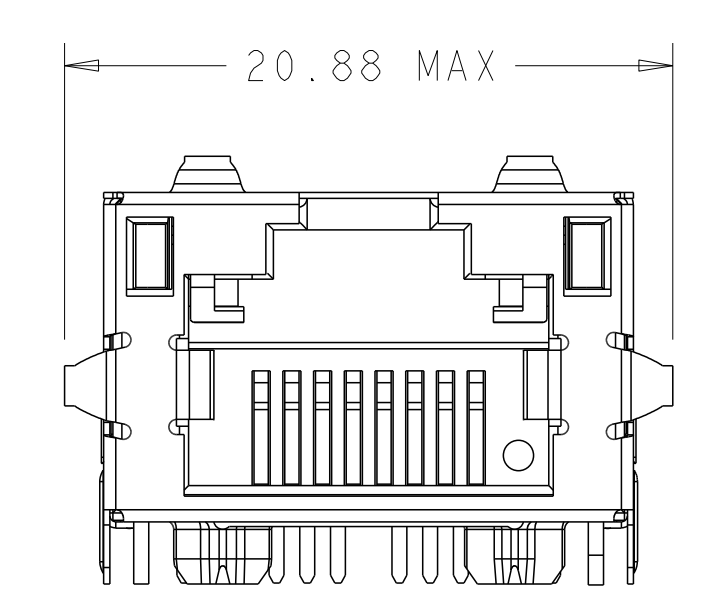


PIN DESIGNATIONS

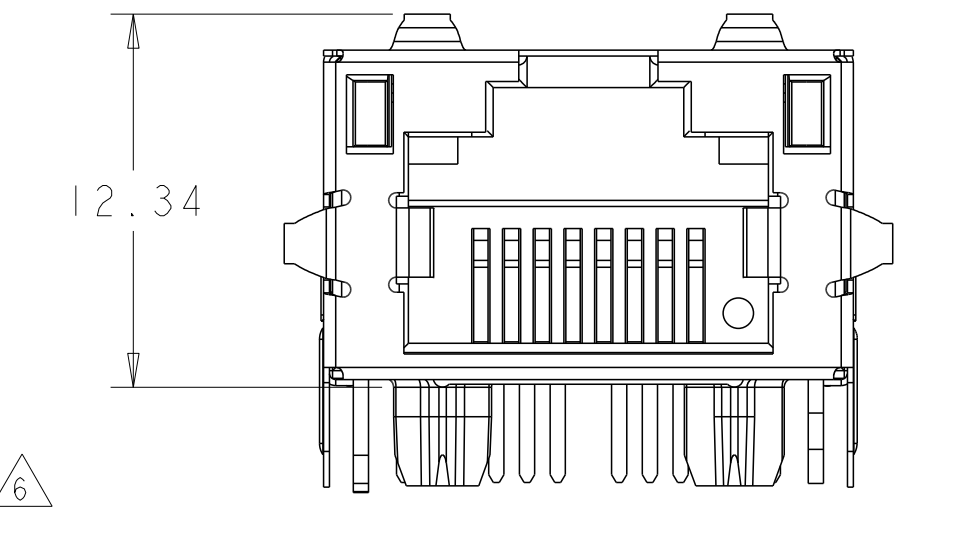
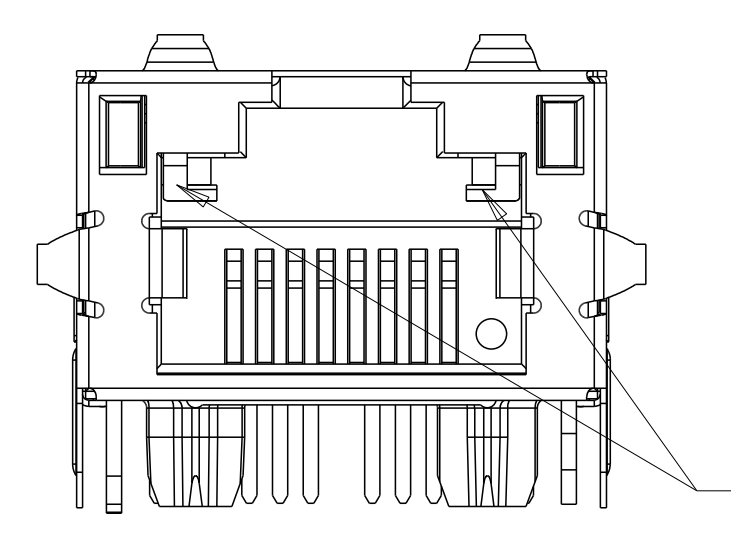
IT IS RECOMMENDED THAT SHADED AREA OF CUSTOMER PC BOARD BE CLEAR OF ANY VIA HOLE, COMPONENT AND CIRCUIT TRACE



1840745-2

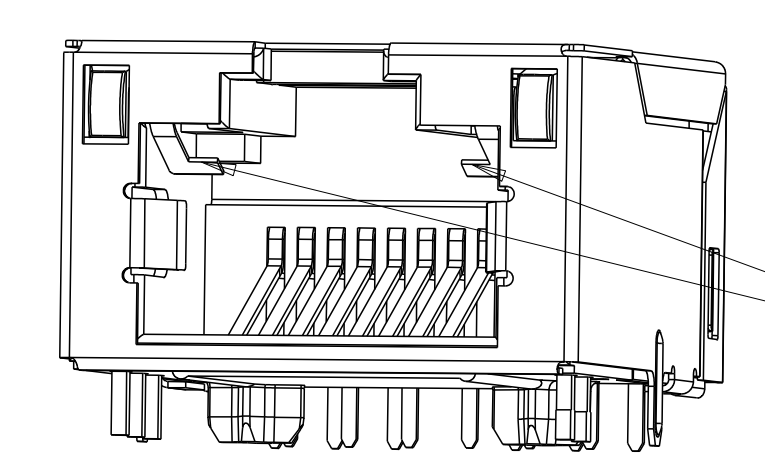


1840745-3



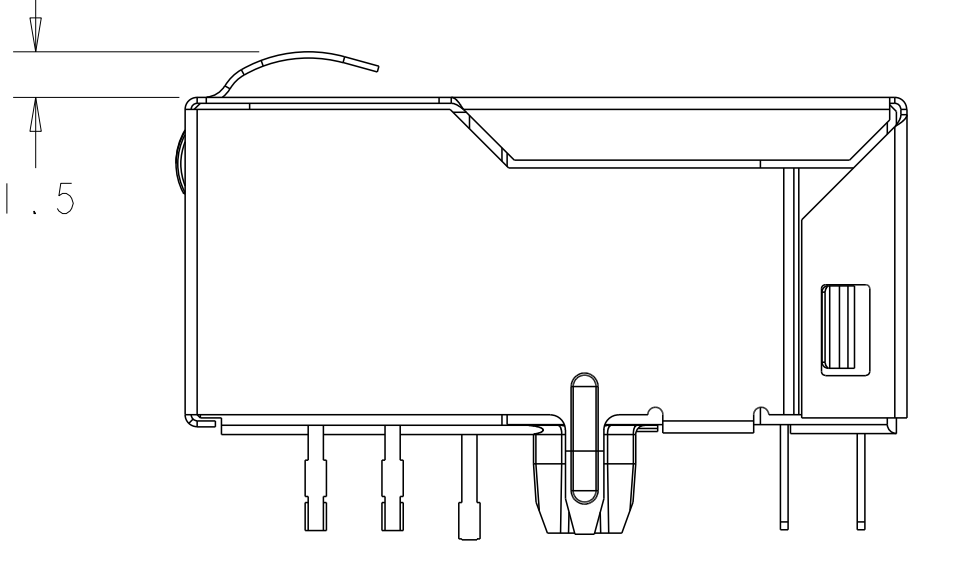
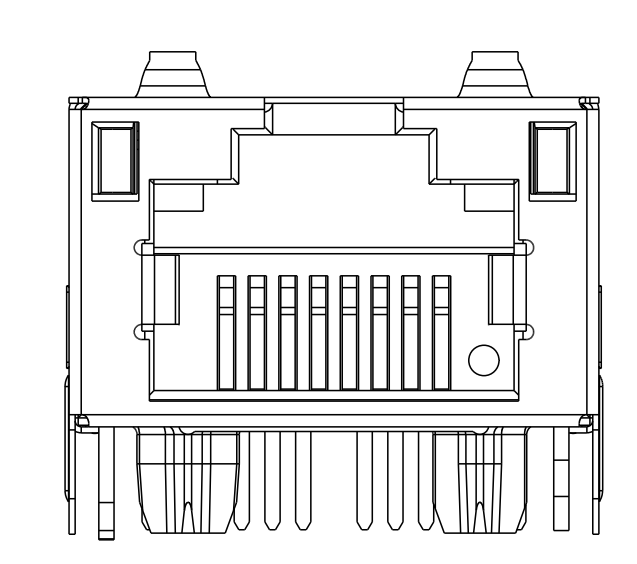
1840745-4  
1-1840745-4

1840745-7

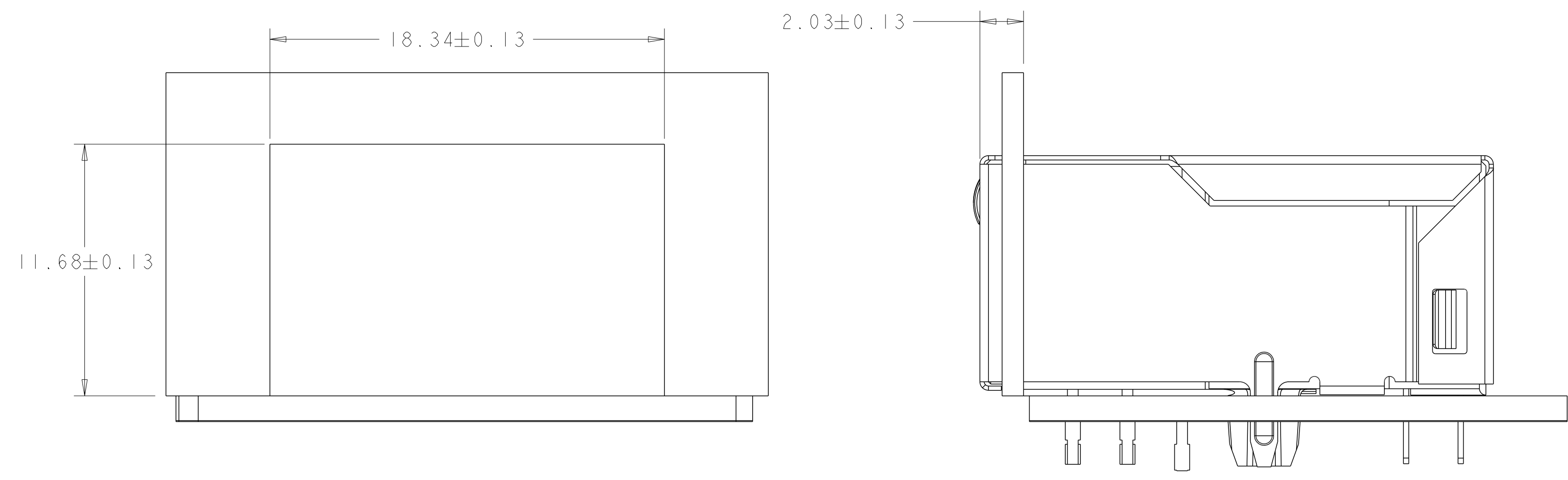


△ RJ45 MOD PLUG SELECTIVE SS SPRING MEMBER

1840745-5



1840745-6



THIS DRAWING IS A CONTROLLED DOCUMENT.		OWN: TOWER YU 180CT2007	<b>trp</b> CONNECTOR a bel group	DONGGUAN CHINA
DIMENSIONS: mm		CHK: KE LTH ZHU 180CT2007		DESC: 1X1 IGI8 GIGABIT TAB UP LOW PROFILE W/ LED
TOLERANCES UNLESS OTHERWISE SPECIFIED:		APP'D: TEDDY XILONG 180CT2007	MODEL NAME: MAGJACK	SIZE: A1
0 PLC ±0.25 1 PLC ±0.25 2 PLC ±0.25 3 PLC ± 4 PLC ± ANGLES ± APPLICATION SPEC ±		PRODUCT SPEC: 108-2207	DESC: SINGLE NON-POE	SCALE: 4:1
			CAGE CODE: 1840745	SHEET 2 OF 2
			CUSTOMER DRAWING	REV M