

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	APPD
D		LOGO CHANGE	25APR2013	TY KZ
E		EC-1411035 COMPANY LOGO CHANGE	13JAN2015	TYR TYN

1. MATERIALS:

- HOUSING: HIGH TEMPERATURE NYLON, BLACK, UL 94V-0
- SHIELD: 0.25mm THICK, BRASS PREPLATED WITH 0.76  $\mu$ m MIN SEMI-BRIGHT NICKEL;
- CONTACT TAILS: 0.20mm THICK, PHOSPHOR BRONZE, 1.27  $\mu$ m MIN OVERALL NICKEL UNDERPLATE, 3  $\mu$ m MIN TIN PLATE
- MOD JACK CONTACTS: 0.25mm THICK, PHOSPHOR BRONZE, 1.27  $\mu$ m MIN OVERALL NICKEL UNDERPLATE, WITH 1.27  $\mu$ m MIN LOCALIZED GOLD PLATE AT PLUG INTERFACE
- LIGHT EMITTING DIODE (LED): DIFFUSED EPOXY LENS, CARBON STEEL WIREFRAME PREPLATED WITH 2.03  $\mu$ m SILVER PLATE OVER 1.02  $\mu$ m NICKEL OVER 1.02  $\mu$ m COPPER UNDERPLATES; LEADS POST-PLATED WITH 3.05  $\mu$ m TIN.

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

3. MAGNETICS

- APPLICATION: 10/100/1000 BASE-T
- IMPEDANCE: 100  $\Omega$
- TURNS RATIO (CHIP:CABLE): 1:1 ALL FOUR PAIRS
- OPEN CIRCUIT INDUCTANCE (OCL): 350  $\mu$ H MIN @100kHz, 0.1VRMS, 8mADC BIAS FROM 0 °C TO 70 °C, ALL FOUR PAIRS
- ALL FOUR PAIRS BI-DIRECTIONAL
- PERFORMANCE @ 25 °C:

INSERTION LOSS (IL):

1.1dB MAX FROM 0.5MHz TO 100MHz

RETURN LOSS (RL):

18dB MIN FROM 0.5MHz TO 40MHz

12-20LOG(f/80)dB MIN FROM 40.1MHz TO 100MHz

CROSSTALK ATTENUATION:

35dB MIN FROM 0.5MHz TO 40MHz

33-20LOG(f/50)dB MIN FROM 40.1MHz TO 100MHz

COMMON MODE REJECTION RATIO (CMRR):

30dB MIN FROM 0.5MHz TO 100MHz

-ISOLATION VOLTAGE:

2250VDC (MAX) FOR 60 SECONDS WITH A RISE TIME OF 500V/SEC AND WITH ALL PORTS CONNECTED.

△ OPERATING TEMPERATURE:  
FROM 0°C TO +70°C.

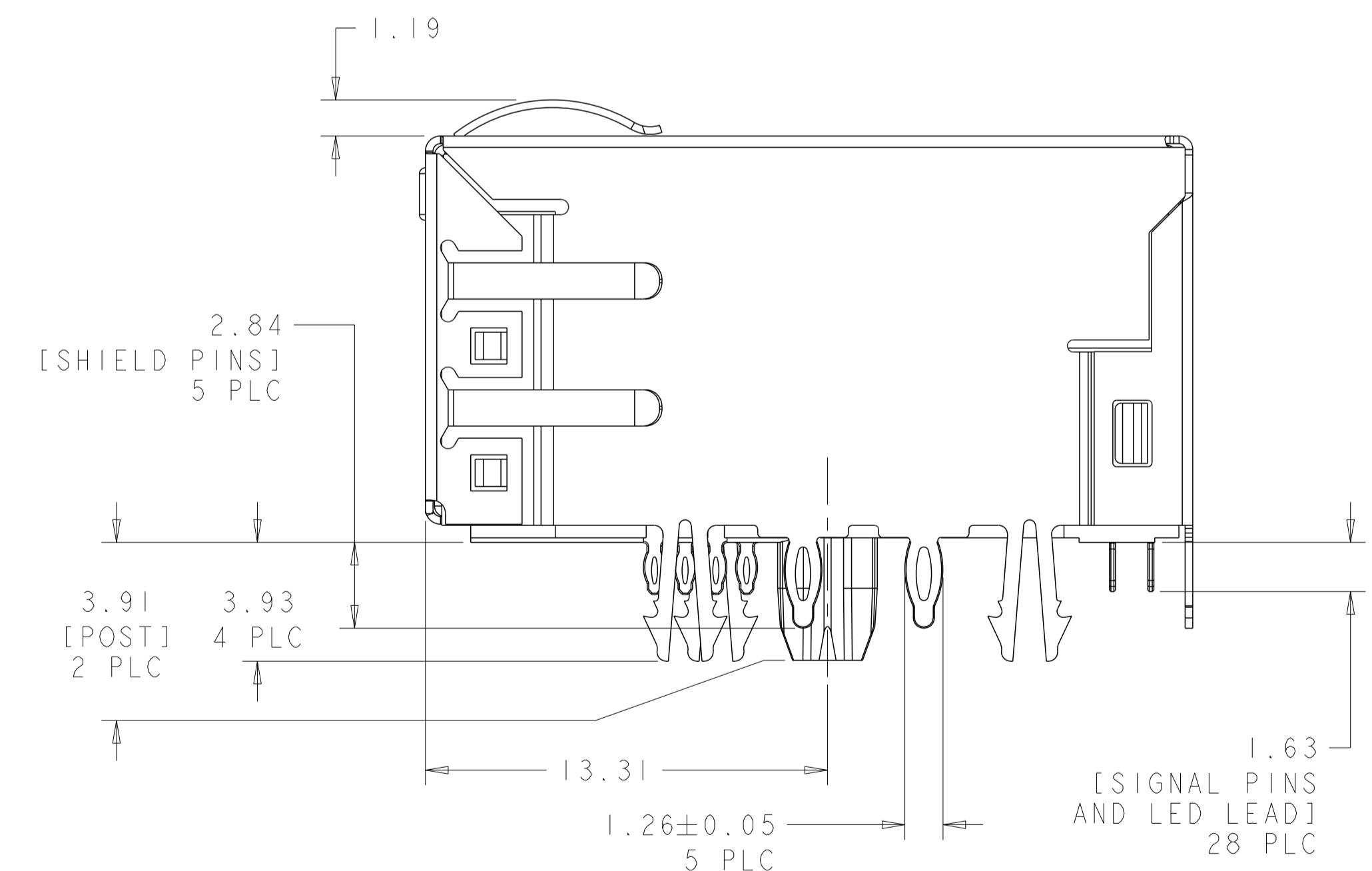
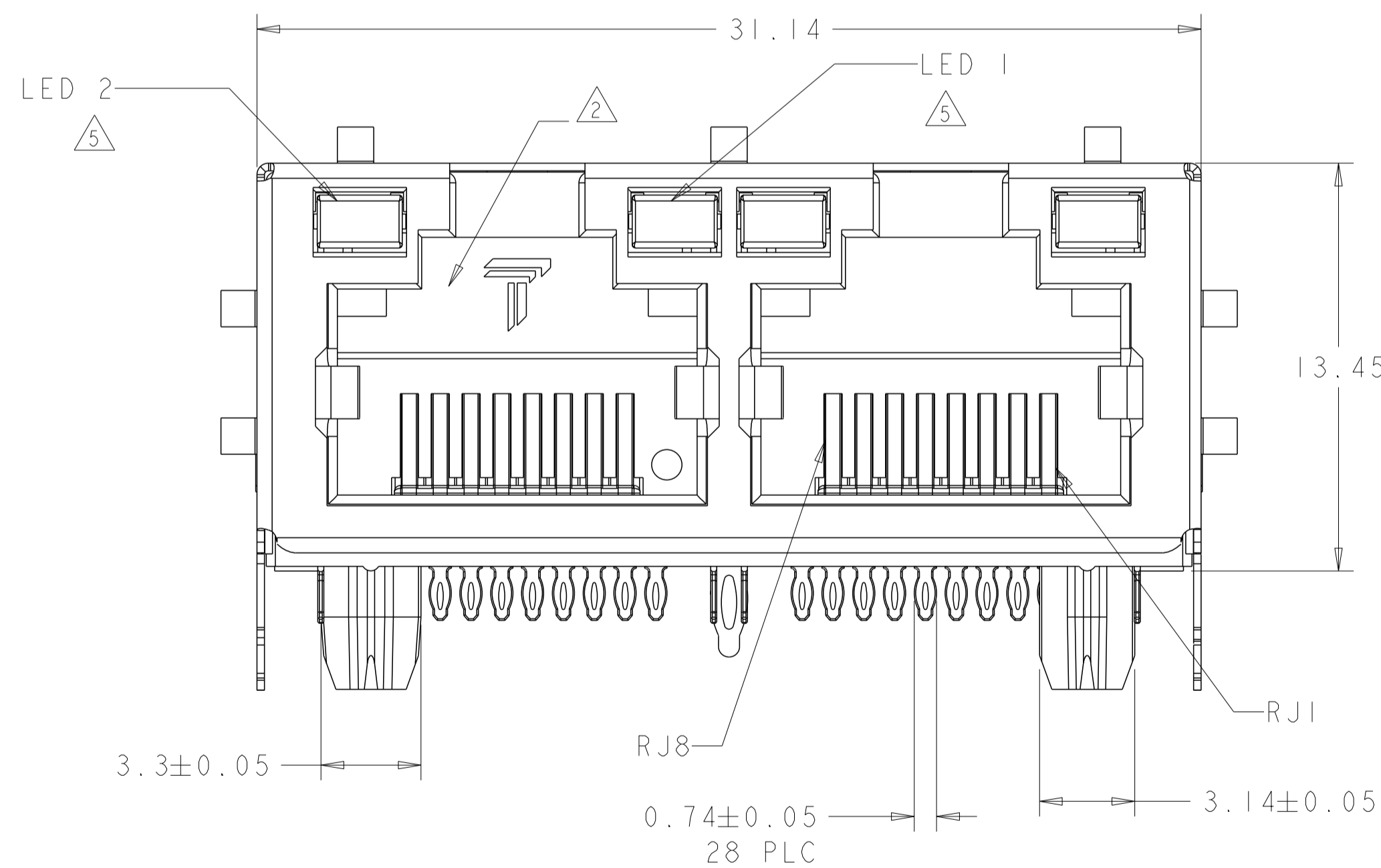
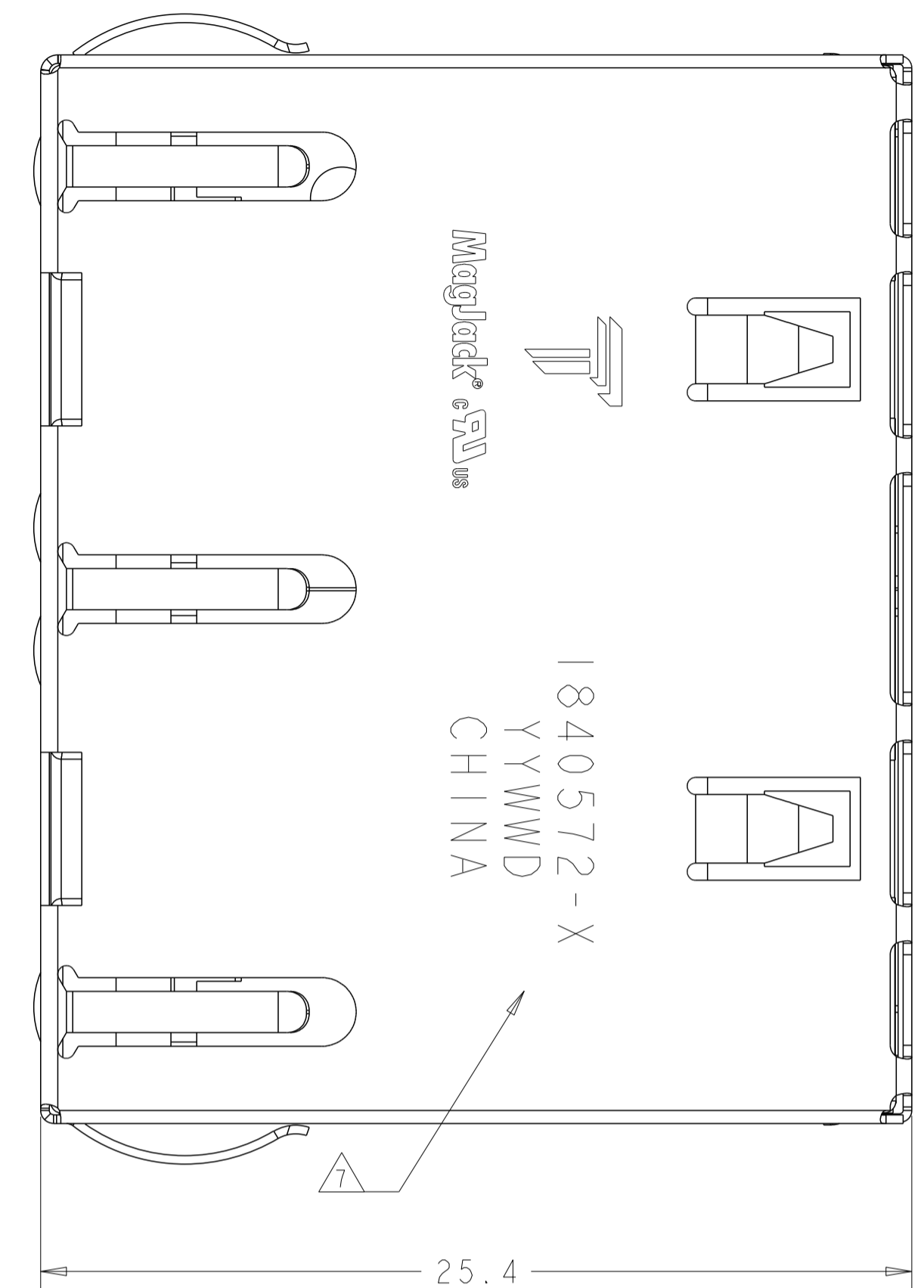
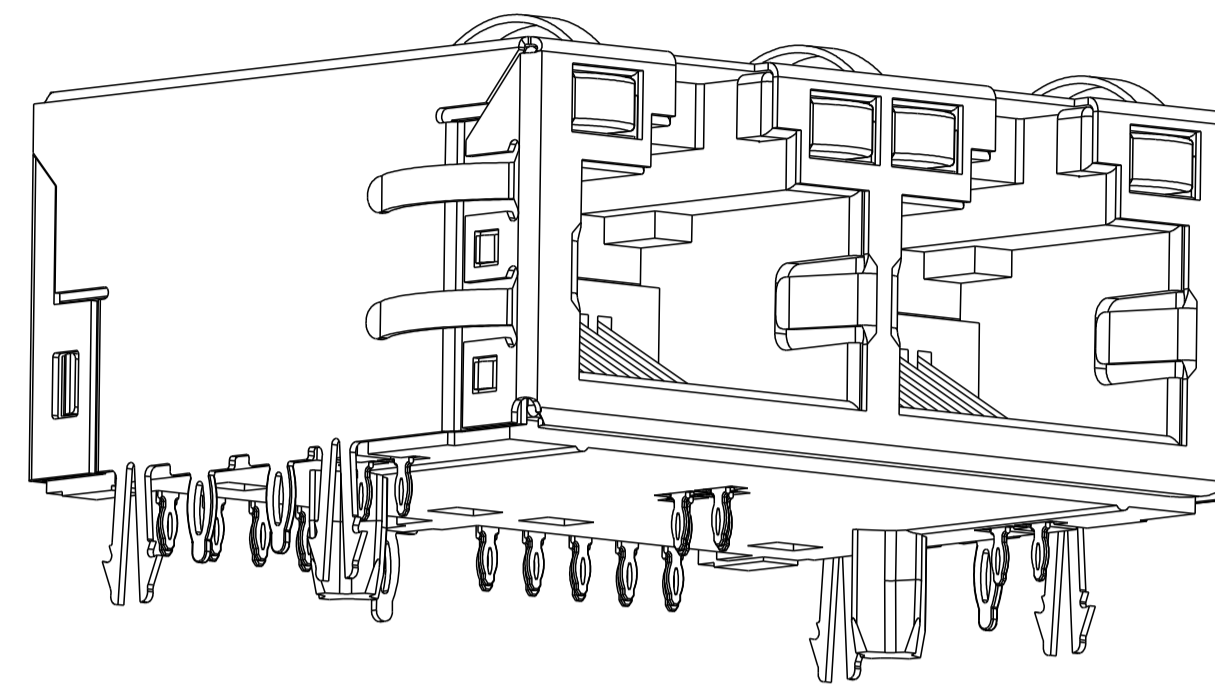
△ LEDS ARE DRIVEN WITH CONSTANT CURRENT AT APPROX 20 mA

- LED COLOR: DOMINANT WAVELENGTH ( $\lambda$ D):
- GREEN 568 nm TYP @ IF=20 mA
- FORWARD VOLTAGE (VF):
- GREEN 2.2V TYP @ IF=20 mA
- DOMINANT WAVELENGTH ( $\lambda$ D):
- YELLOW 588 nm TYP @ IF=20 mA
- FORWARD VOLTAGE (VF):
- YELLOW 2.1V TYP @ IF=20 mA

△ ALL DIMENSIONS ARE NOMINAL UNLESS OTHERWISE NOTED.

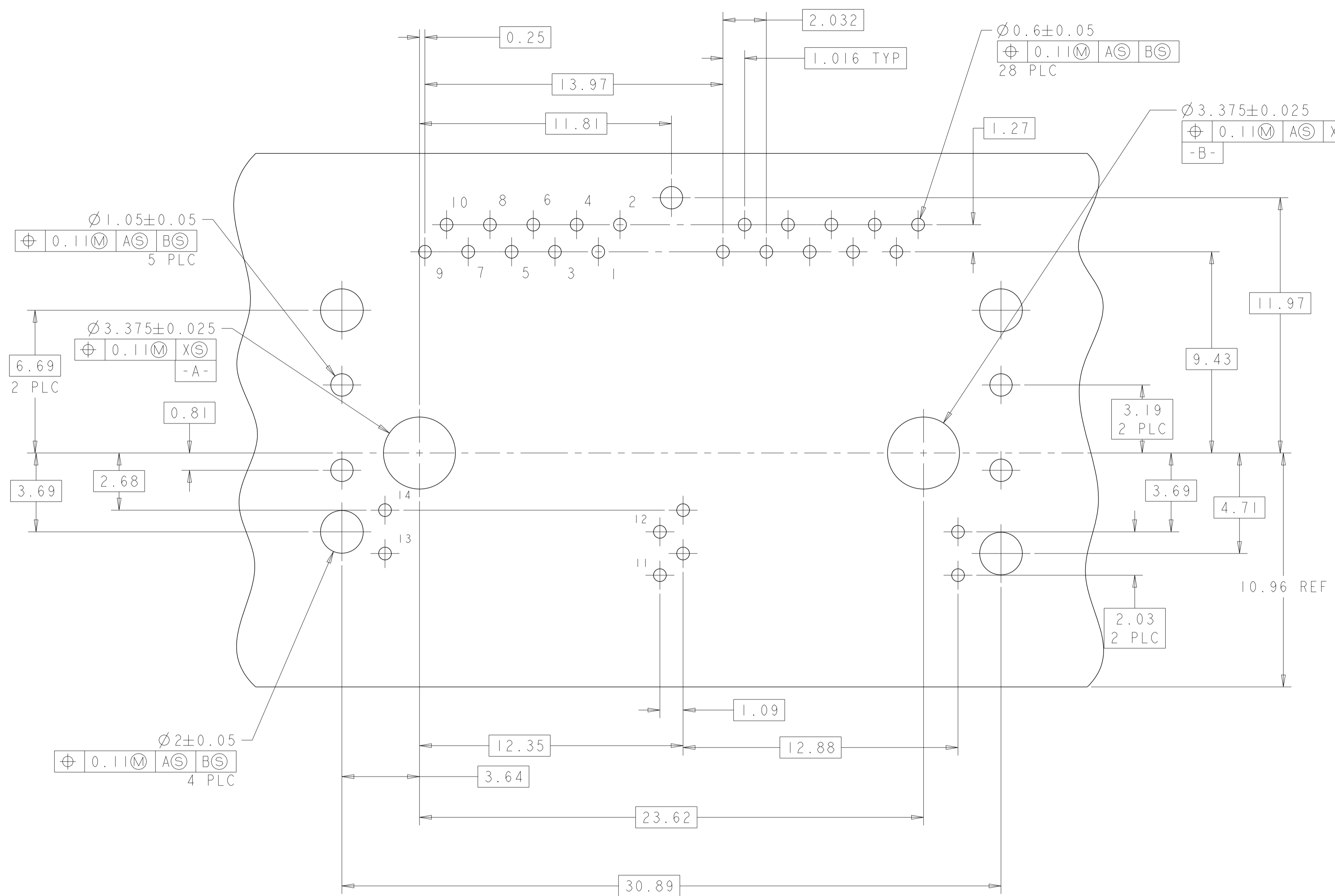
△ TRADEMARK, PART NUMBER, DATE CODE, COUNTRY OF ORIGIN, AND AGENCY APPROVAL MARKING IN APPROXIMATE LOCATION SHOWN

8 THESE PARTS ARE NOT DESIGNED FOR WAVE OR IR RELFOW SOLDERING APPLICATION

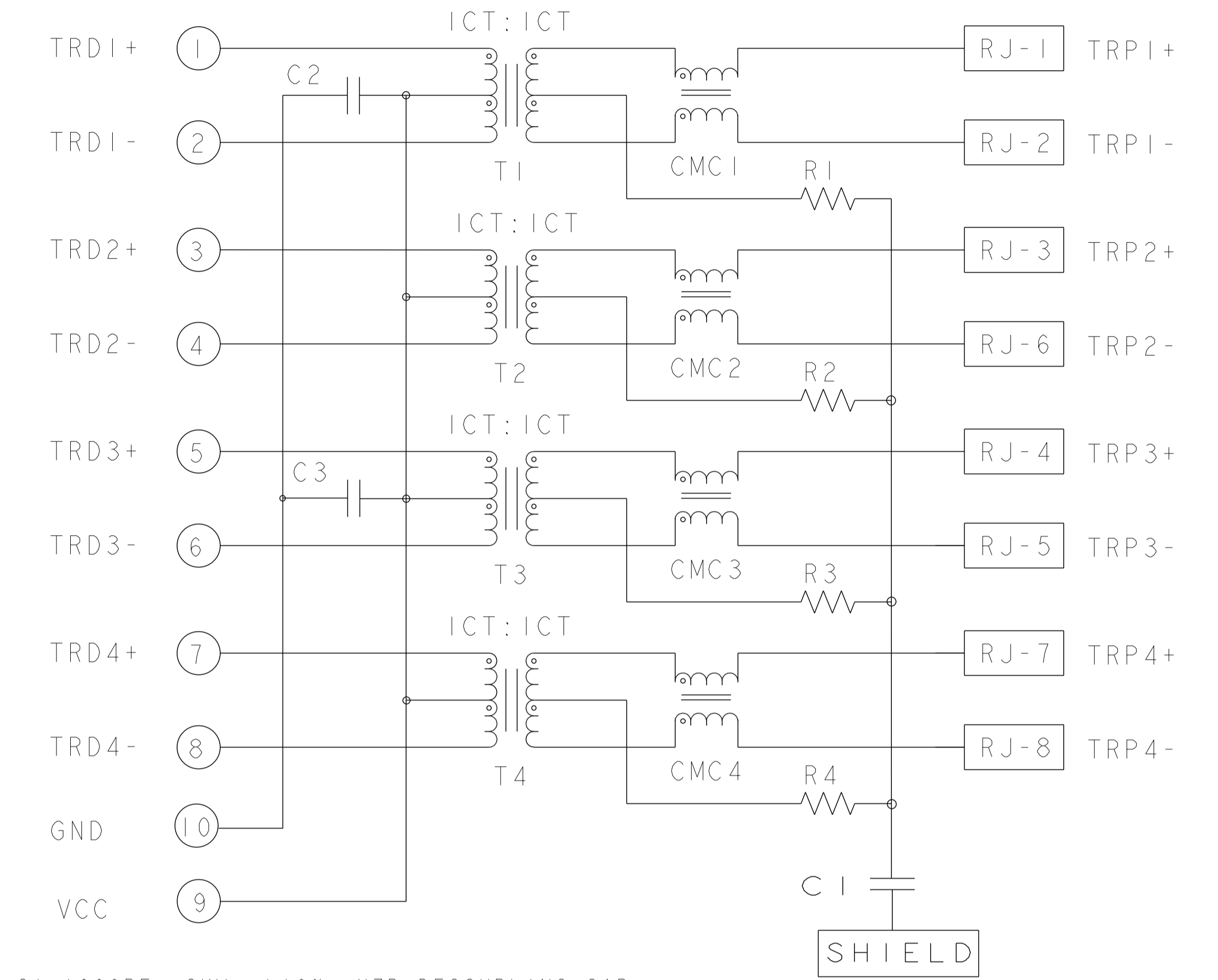


GREEN	GREEN	1840572-7
GREEN/YELLOW	GREEN/YELLOW	1840572-6
LED 2	LED 1	PART NO.

THIS DRAWING IS A CONTROLLED DOCUMENT.		OWN: TOWER YU 04SEP2009	 DONGGUAN CHINA
DIMENSIONS: mm		CHK: KE LTH ZHU 04SEP2009	
TOLERANCES UNLESS OTHERWISE SPECIFIED:		APPD: KE LTH ZHU 04SEP2009	
0 PLC $\pm 0.25$ 1 PLC $\pm 0.25$ 2 PLC $\pm 0.25$ 3 PLC $\pm$ 4 PLC $\pm$ ANGLES $\pm$ APPLICATION SPEC $\pm$		MODEL NAME: MAGJACK GANG NON-POE	
PRODUCT SPEC: 108-104013		DESC: 1X2 7G74P2 GIGABIT TAB UP PRESSFIT W/ LED	RESTRICTED TO: A1
CUSTOMER DRAWING		SCALE: 6:1	SHEET 1 OF 3 REV E

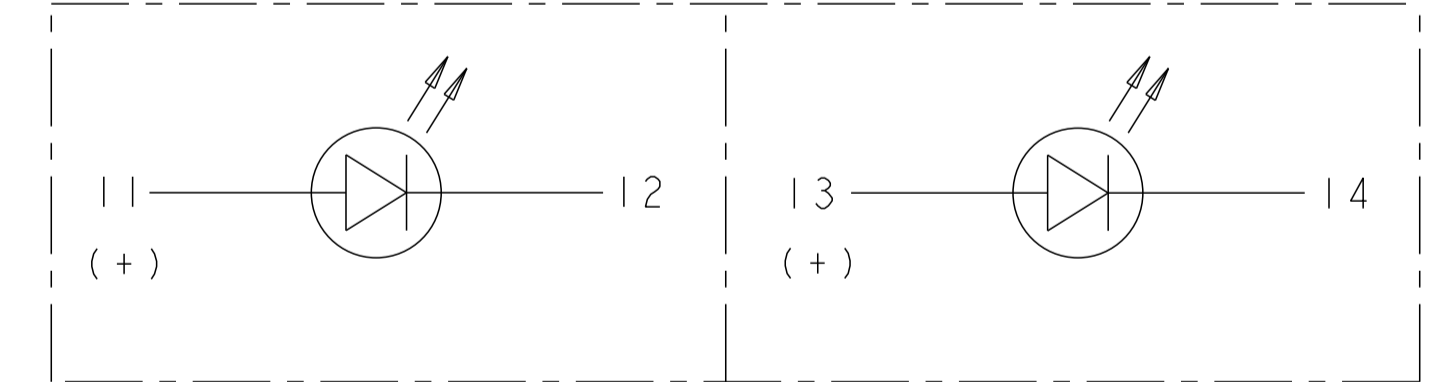


7G74P2 GIGABIT BASE-T CIRCUIT

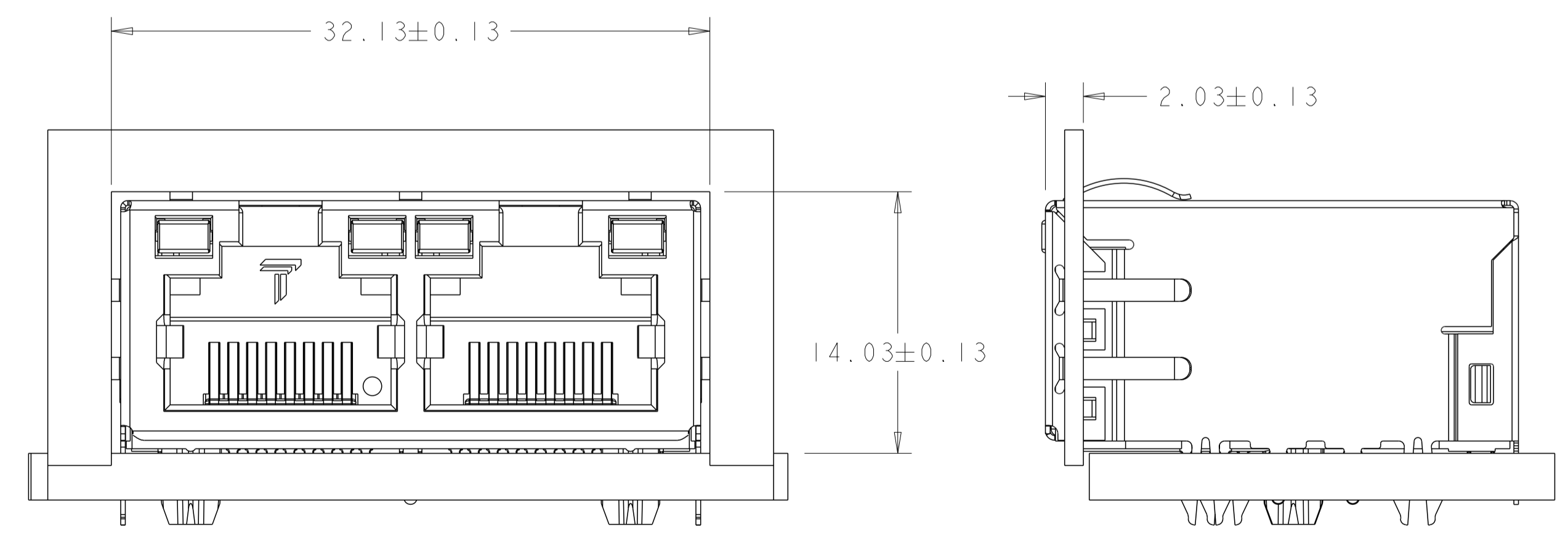
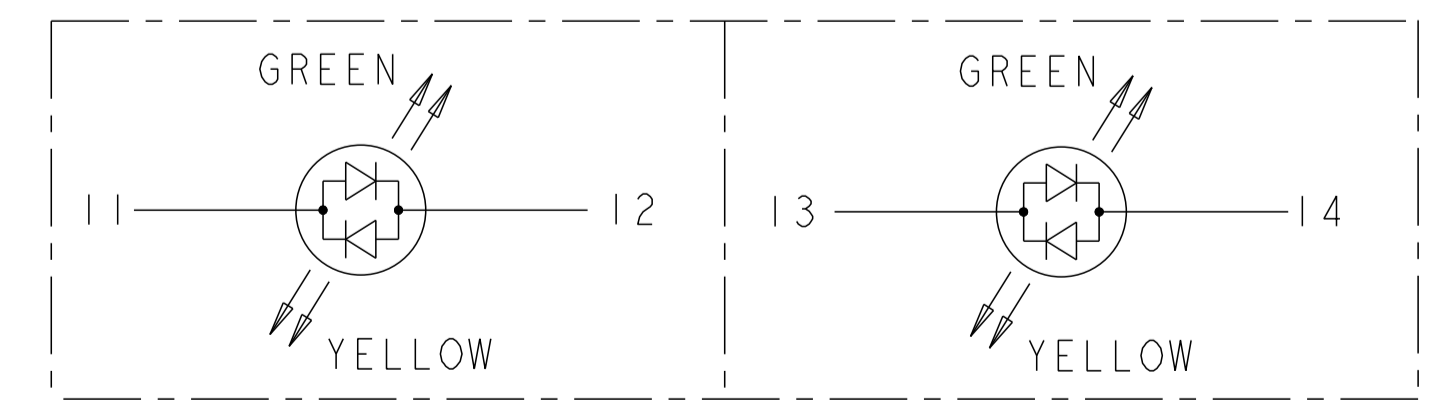


C1=1000PF, 3KV,  $\pm 10\%$ , X7R DECOUPLING CAP  
 C2 -C3 = 100 nf CAPACITOR  
 R1-R4 = 75 OHMS, 1/16W,  $\pm 5\%$  RESISTORS

SINGLE COLOR LED

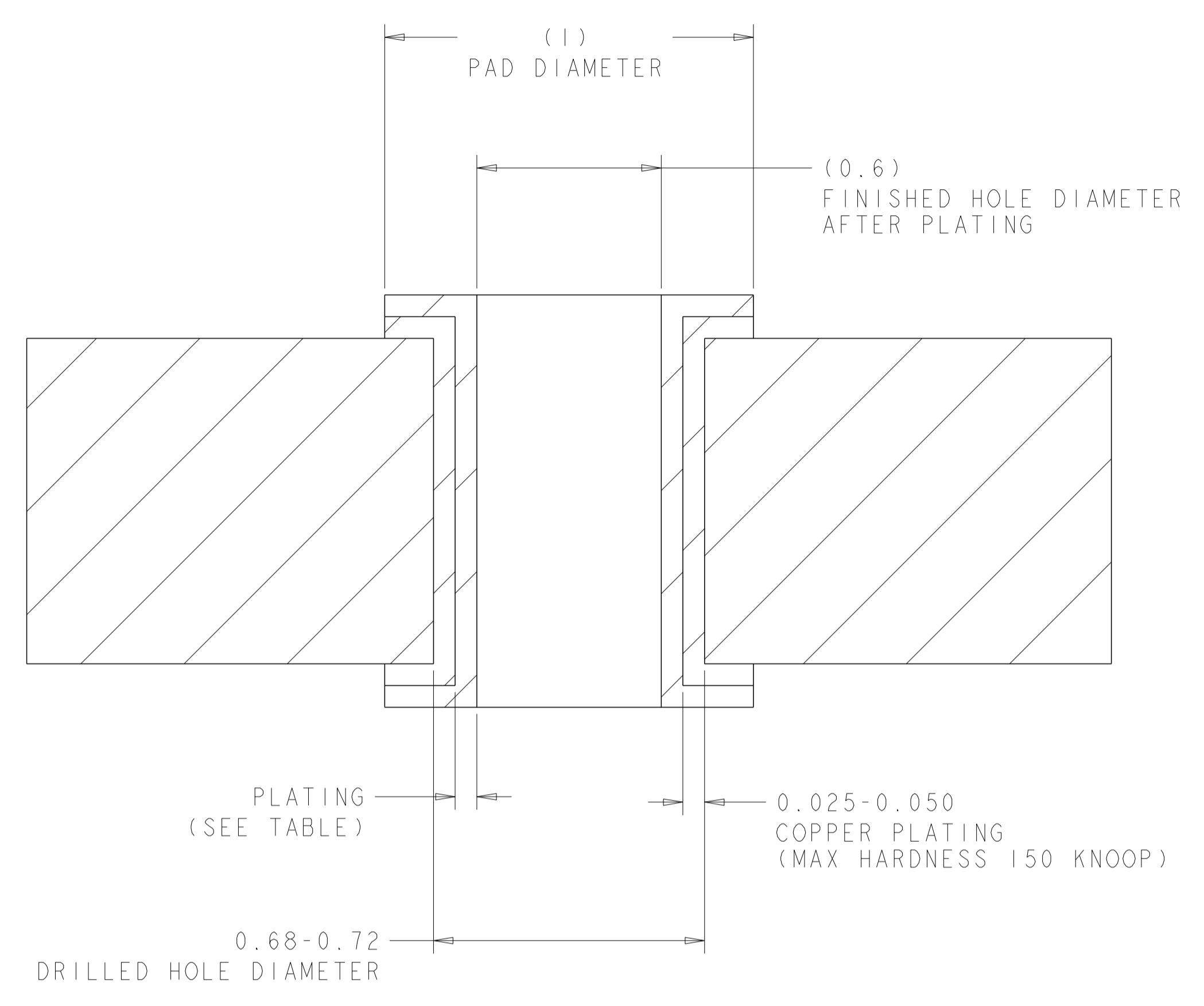


BI-COLOR LED

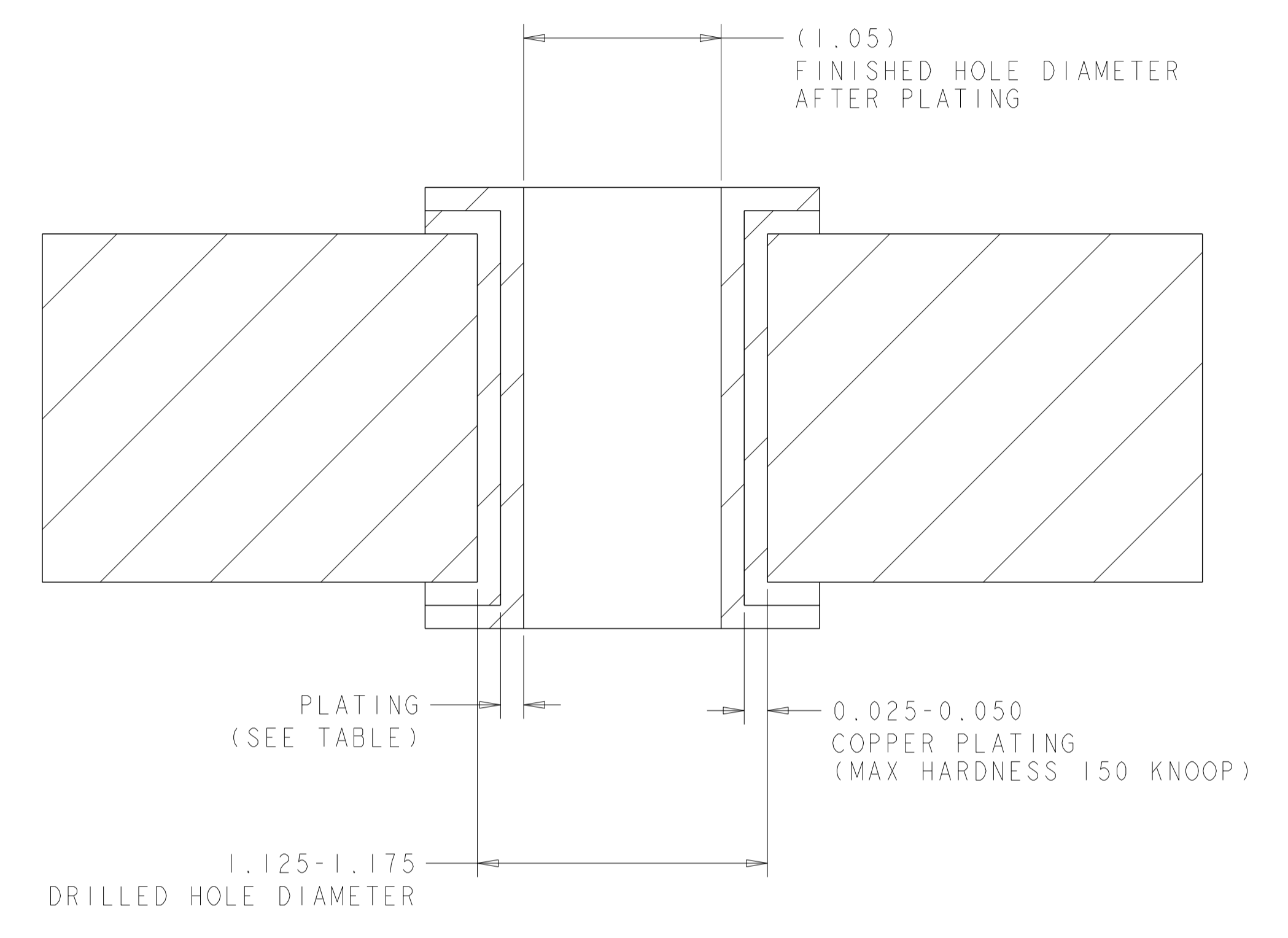


SUGGESTED PANEL OPENING

THIS DRAWING IS A CONTROLLED DOCUMENT.		OWN: TOWER YU 04SEP2009	<b>trp</b> CONNECTOR a bel group DONGGUAN CHINA
DIMENSIONS: mm		CHK: KE LTH ZHU 04SEP2009	
		APP'D: KE LTH ZHU 04SEP2009	
TOLERANCES UNLESS OTHERWISE SPECIFIED: 0 PLC $\pm 0.25$ 1 PLC $\pm 0.25$ 2 PLC $\pm 0.25$ 3 PLC $\pm 0.25$ 4 PLC $\pm 0.25$ ANGLES $\pm$ APPLICATION SPEC $\pm$		MODEL NAME: MAGJACK GANG NON-POE	
PRODUCT SPEC: 108-104013		SIZE: A1	DESC: 1X2 7G74P2 GIGABIT TAB UP PRESSFIT W/ LED
		CUSTOMER DRAWING	RESTRICTED TO: -
		SCALE: 4:1	SHEET: 2 OF 3
			REV: E



RECOMMENDED HOLE DIMENSIONS FOR SIGNAL CONTACTS



RECOMMENDED HOLE DIMENSIONS FOR SHIELD CONTACTS

THICKNESS	PLATING
0.004-0.010	HOT AIR SOLDER LEVELING (HASL) TIN-LEAD (Sn Pb)
0.0005-0.001	IMMERSION TIN (Sn)
0.0002-0.0005	ORGANIC SOLDERABILITY PRESERVATIVE (OSP)
0.0001-0.0005 Au, 0.004-0.0076 Ni	IMMERSION GOLD (Au) OVER NICKEL (Ni) (ENIG)
0.010-0.025	TIN LEAD PLATING (Sn Pb)
0.0001-0.00015	IMMERSION SILVER (Ag)

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DIMENSIONS:	TOLERANCES UNLESS OTHERWISE SPECIFIED:	DWG: TOWER YU 04SEP2009	 <b>TRP CONNECTOR</b> <small>a bel group</small> DONGGUAN CHINA
mm	0 PLC ±0.25	CHK: KE LTH ZHU 04SEP2009	
	1 PLC ±0.25	APP'D: KE LTH ZHU 04SEP2009	
PRODUCT SPEC	APPLICATION SPEC	MODEL NAME	DESC
108-104013	-	MAGJACK	IX2 7G74P2 GIGABIT
		GANG NON-POE	TAB UP PRESSFIT W/ LED
		CUSTOMER DRAWING	SCALE 1:1 SHEET 3 OF 3 REV E

# Mouser Electronics

Authorized Distributor

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Bel:

[1840572-6](#) [1840572-7](#)