

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	LYR	DESCRIPTION	DATE	DWN APVD
E		EC-1805035	25MAY2018	JY TY
F		EC-1807016	11JUL2018	TRY TY
G		EC-1810004	08OCT2018	JY TY

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

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

- 3 MAGNETICS
- APPLICATION: 10/100/1000 BASE-T
 - IMPEDANCE: 100 Ω
 - TURNS RATIO (CHIP:CABLE): 1:1 ALL FOUR PAIRS
 - OPEN CIRCUIT INDUCTANCE (OCL): 350 uH 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

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

- 5 LEDS ARE DRIVEN WITH CONSTANT CURRENT AT APPROX 20 mA
- LED COLOR: DOMINANT WAVELENGTH (λ D): GREEN 568 nm TYP @ IF=20 mA
FORWARD VOLTAGE (VF): GREEN 2.2V TYP @ IF=20 mA
- LED COLOR: DOMINANT WAVELENGTH (λ D): YELLOW 588 nm TYP @ IF=20 mA
FORWARD VOLTAGE (VF): YELLOW 2.1V TYP @ IF=20 mA
- LED COLOR: DOMINANT WAVELENGTH (λ D): ORANGE 605 nm TYP @ IF=20 mA
FORWARD VOLTAGE (VF): ORANGE 2.1V TYP @ IF=20 mA

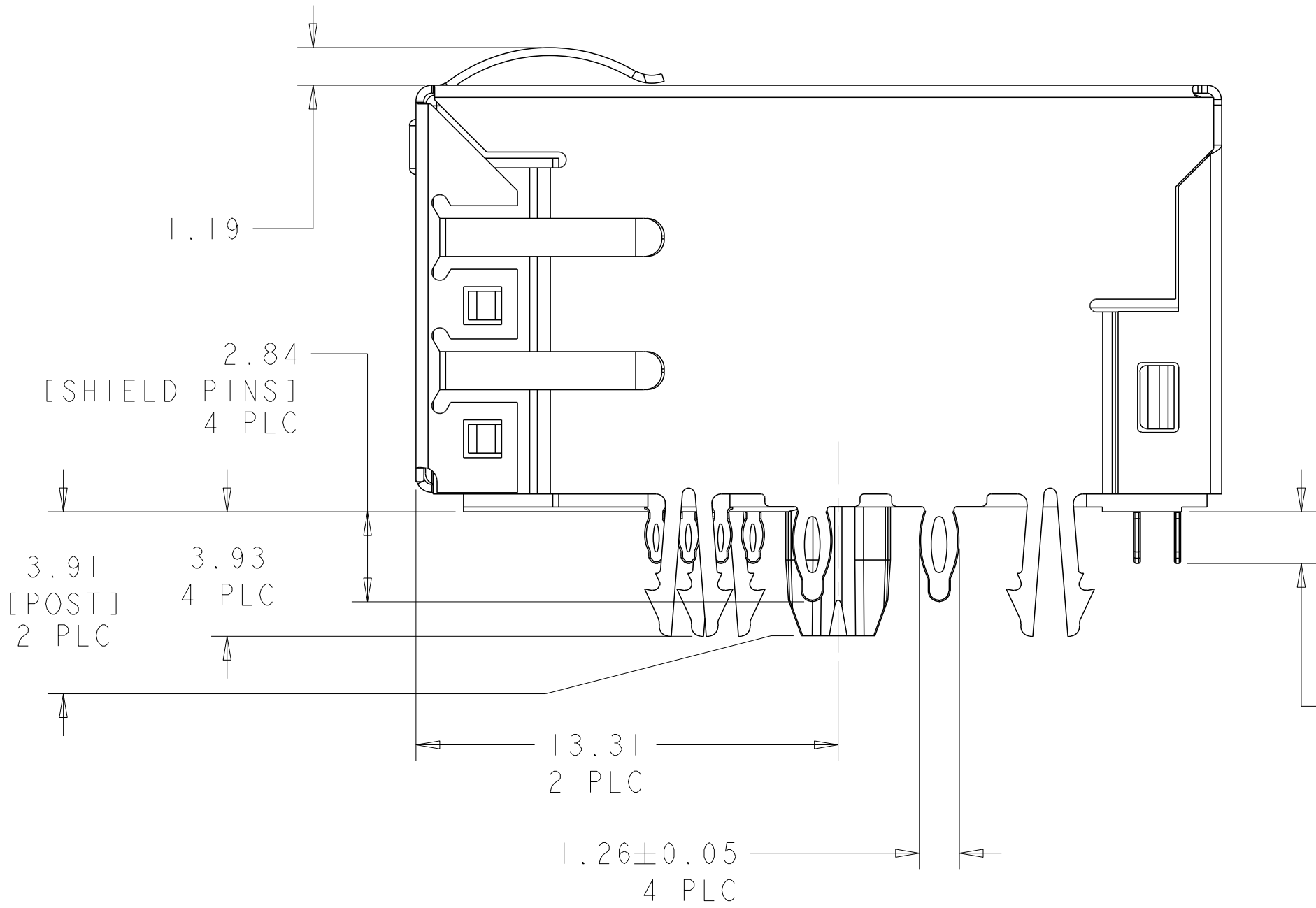
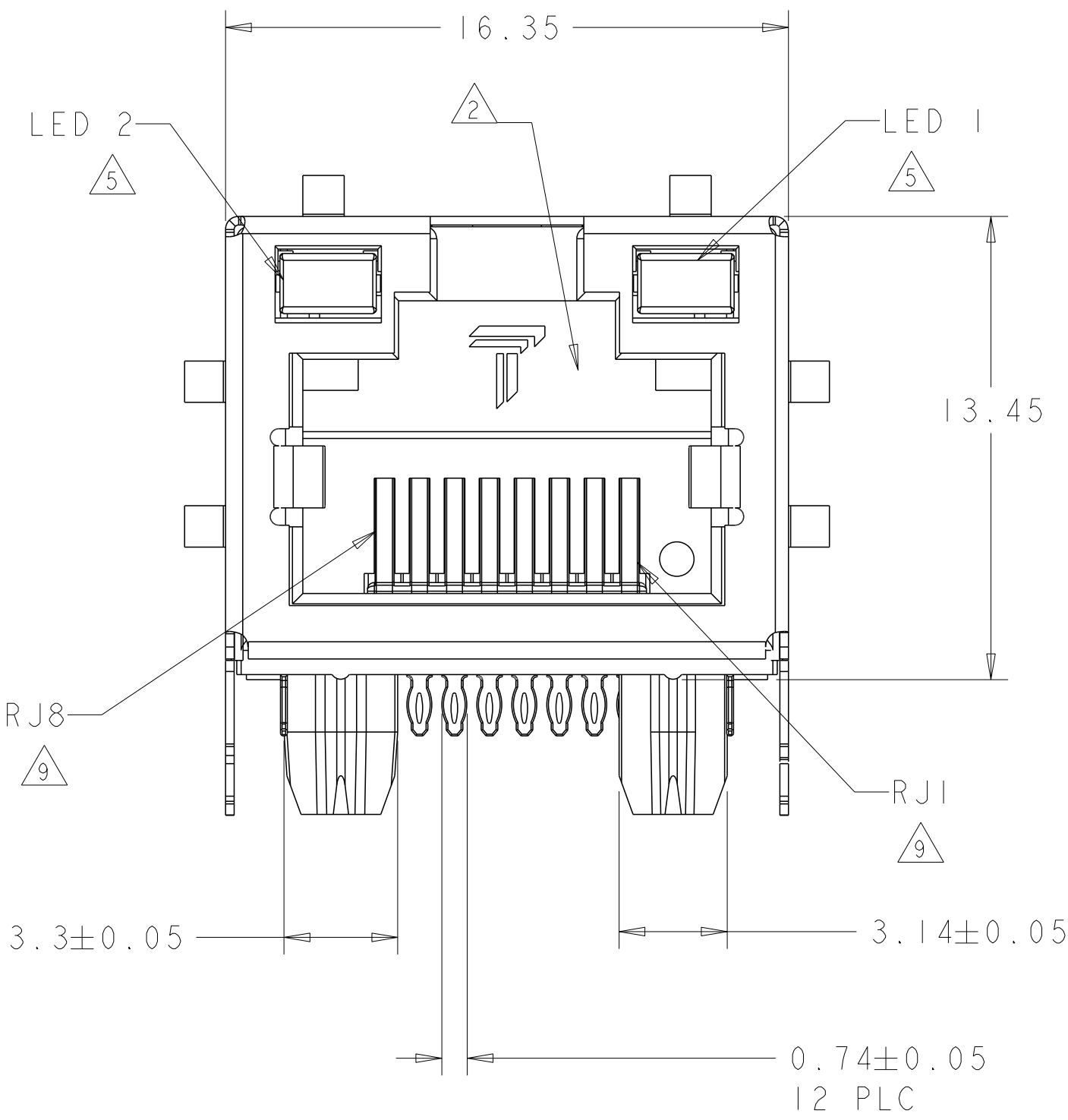
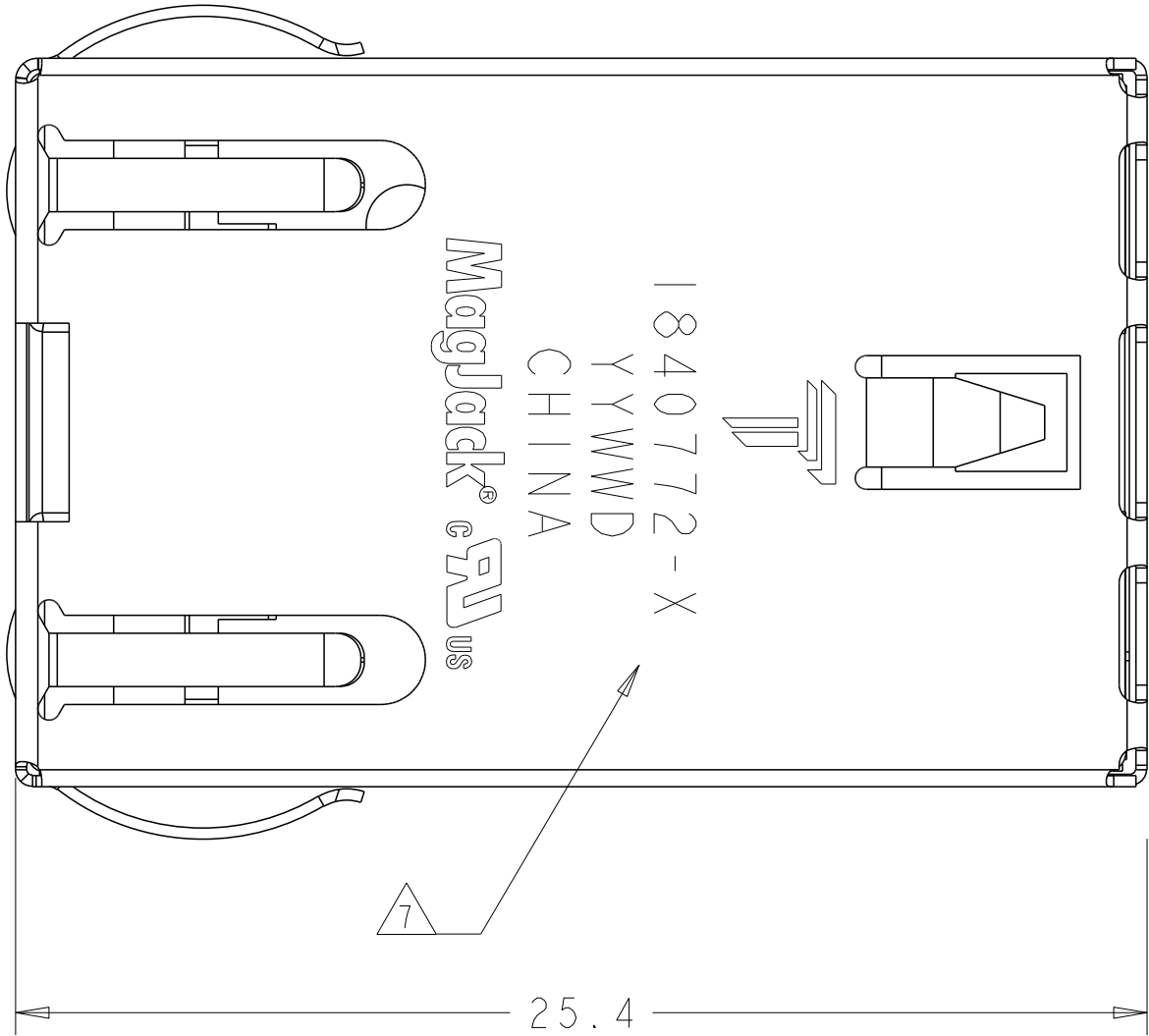
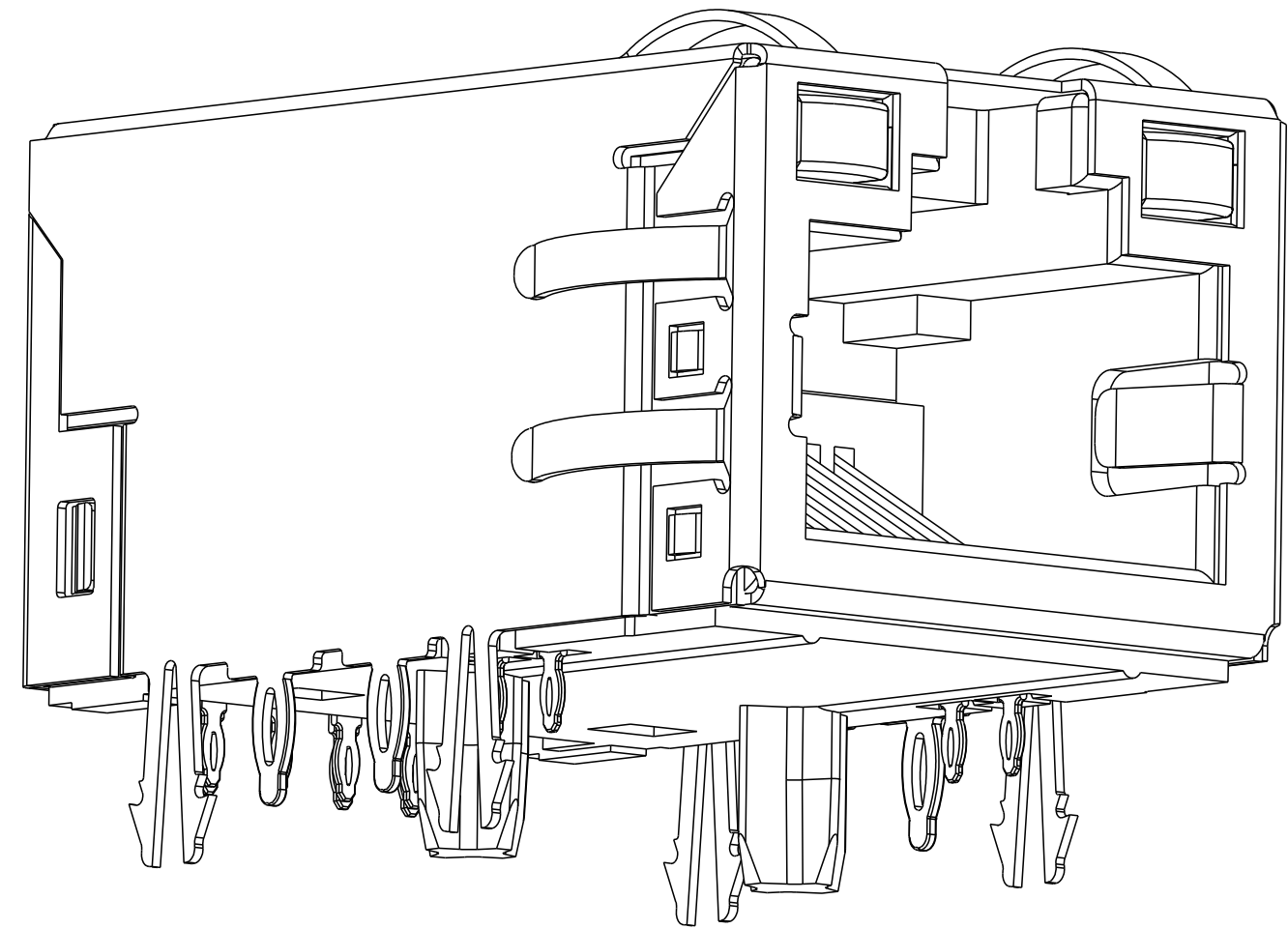
6 ALL DIMENSIONS ARE NOMINAL UNLESS OTHERWISE NOTED.

7 TRADEMARK,PART NUMBER (DETAILED PART NUMBER REFER TO PART LIST), DATE CODE, COUNTRY OF ORIGIN, AND AGENCY APPROVAL MARKING IN APPROXIMATE LOCATION SHOWN

8. THESE PARTS ARE NOT DESIGNED FOR WAVE OR REFLOW SOLDERING APPLICATION

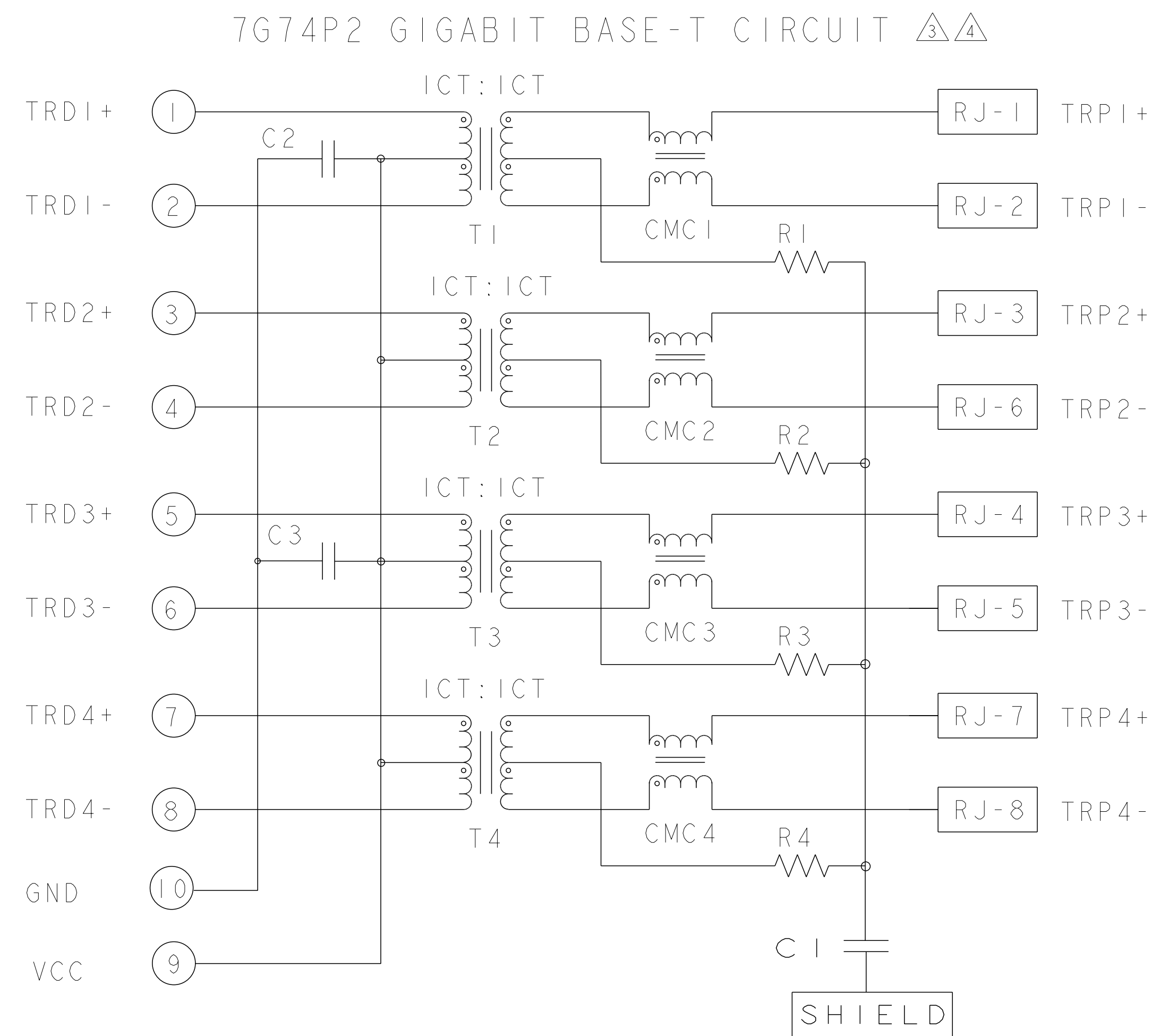
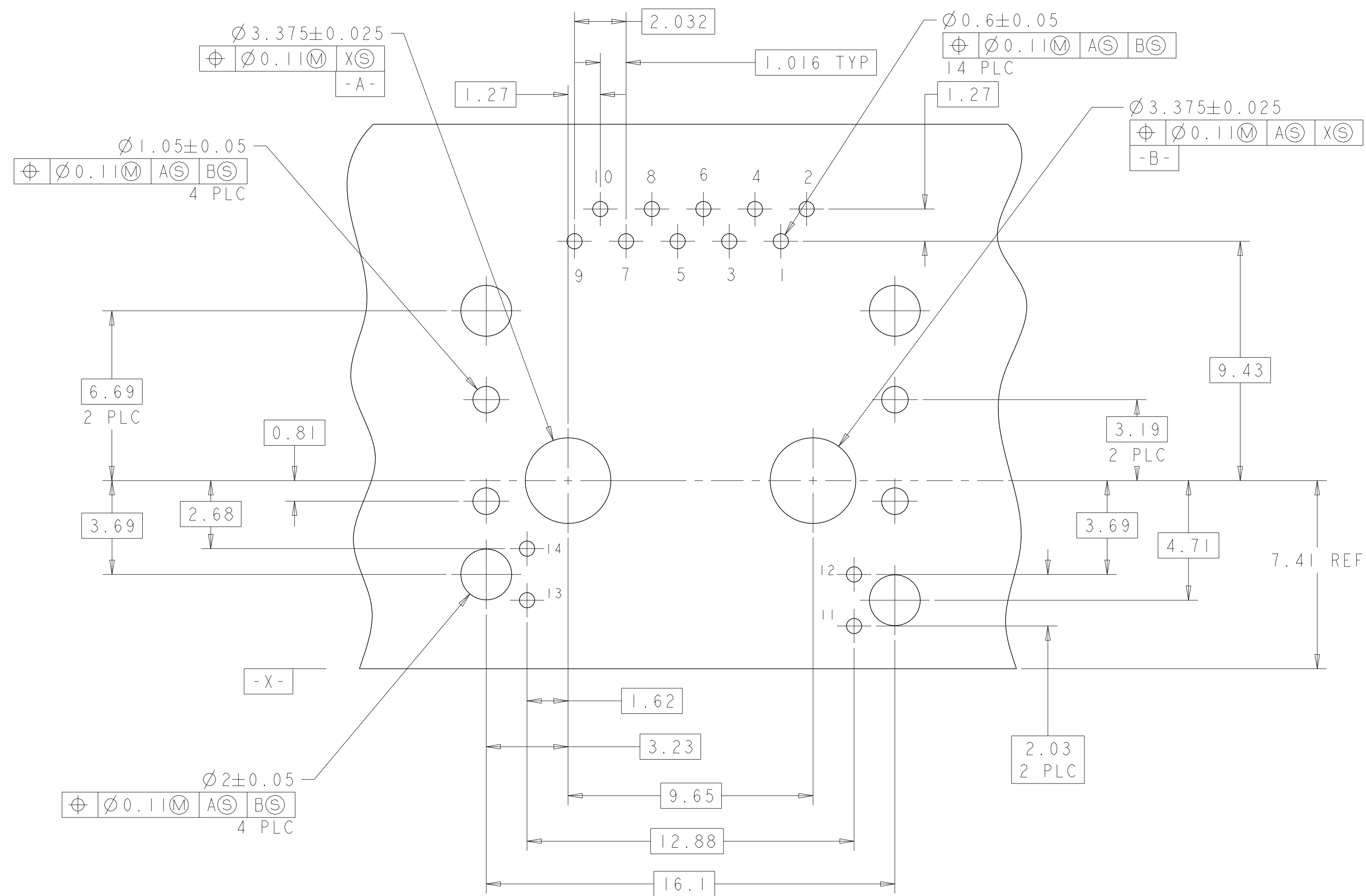
9 CONTACT LUBRICANT IN MATING AREA IS OPTIONAL

10 SUGGESTED PANEL OPENING DIMENSIONS ARE OPTIONAL



WITH	ORANGE	GREEN	1-1840772-7
WITHOUT	GREEN	YELLOW	1840772-8
WITHOUT	GREEN	GREEN	1840772-7
LUBE 9	LED 2	LED 1	PART NO.

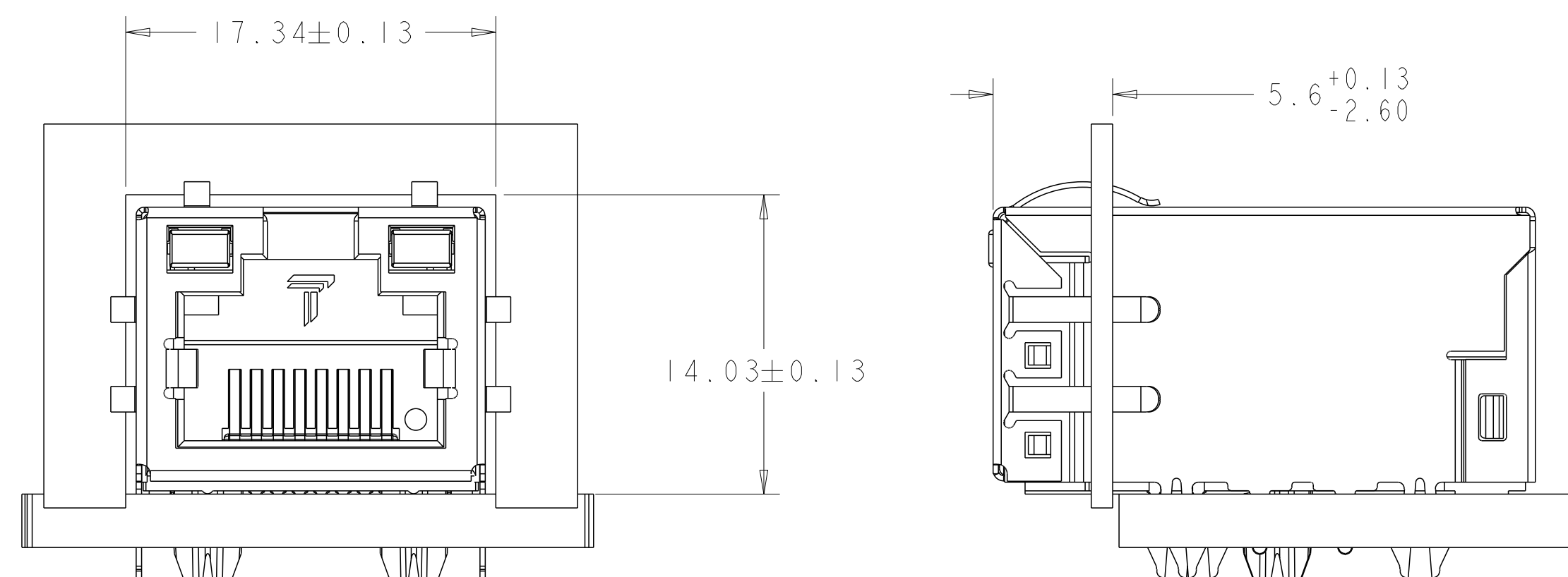
THIS DRAWING IS A CONTROLLED DOCUMENT. AND COMPLIANT TO ASME Y14.5M		DWN TOWER YU 04SEP2009	 trp CONNECTOR a bel group DONGGUAN CHINA	
DIMENSIONS: mm		CHK KEITH ZHU 04SEP2009		
TOLERANCES UNLESS OTHERWISE SPECIFIED: mm		APVD KEITH ZHU 04SEP2009		
0 PLC ±0.25 1 PLC ±0.25 2 PLC ±0.25 3 PLC ± 4 PLC ± ANGLES APPLICATION SPEC		MODEL NAME MAGJACK	DESC 1X1 7G74P2 GIGABIT TAB UP PRESSFIT W/ LED	
PRODUCT SPEC 108-104013		SIZE A1	CAGE CODE C=1840772	RESTRICTED TO -
CUSTOMER DRAWING			SCALE 6:1	SHEET 1 OF 3 REV G



CI=1000PF, 3KV, $\pm 10\%$, X7R DECOUPLING CAP

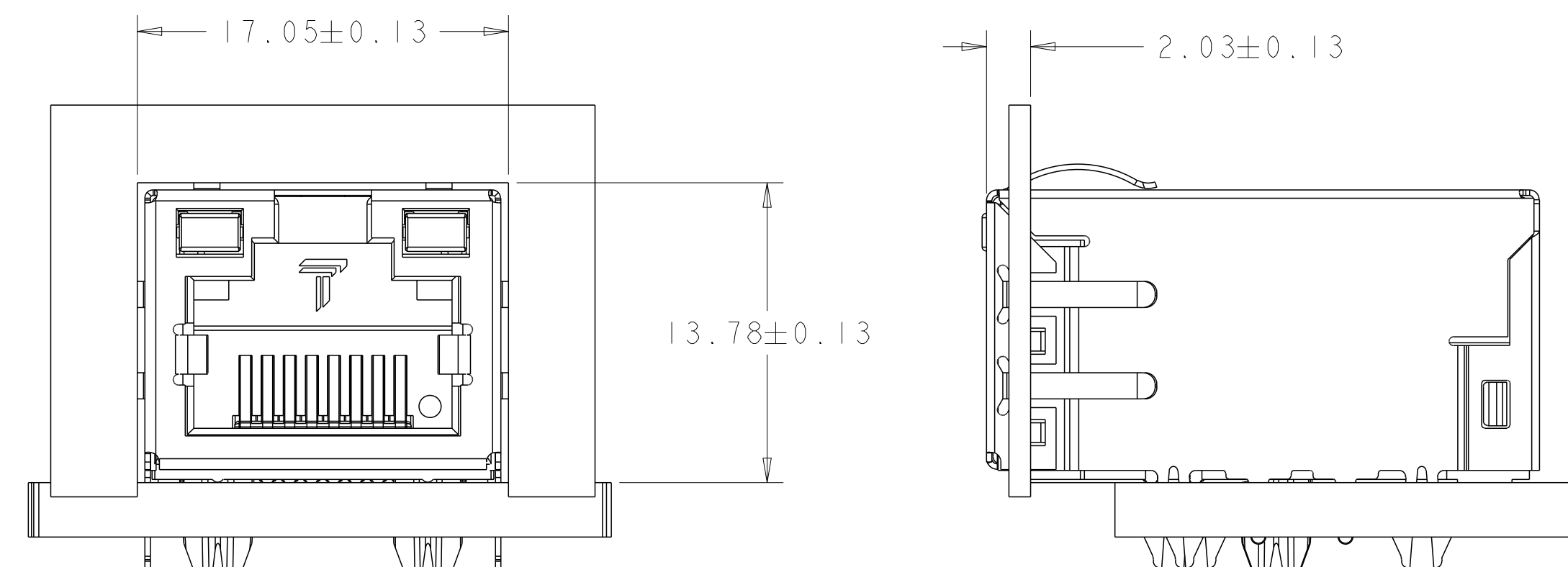
C2 -C3 = 100 n f CAPACITOR

R1-R4 = 75 OHMS, 1/16W, $\pm 5\%$ RESISTORS



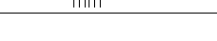
SUGGESTED PANEL OPENING 

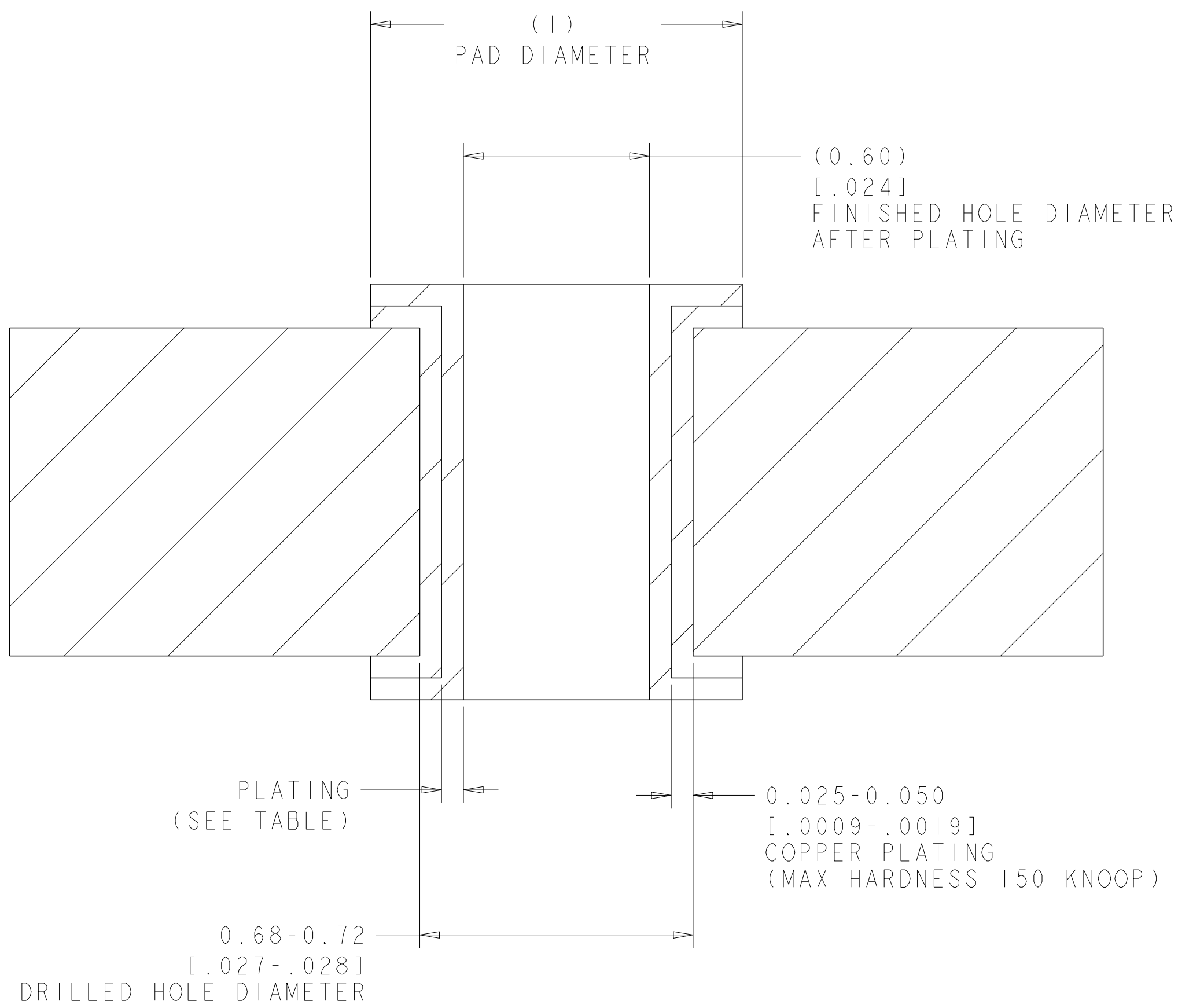
OPTION A



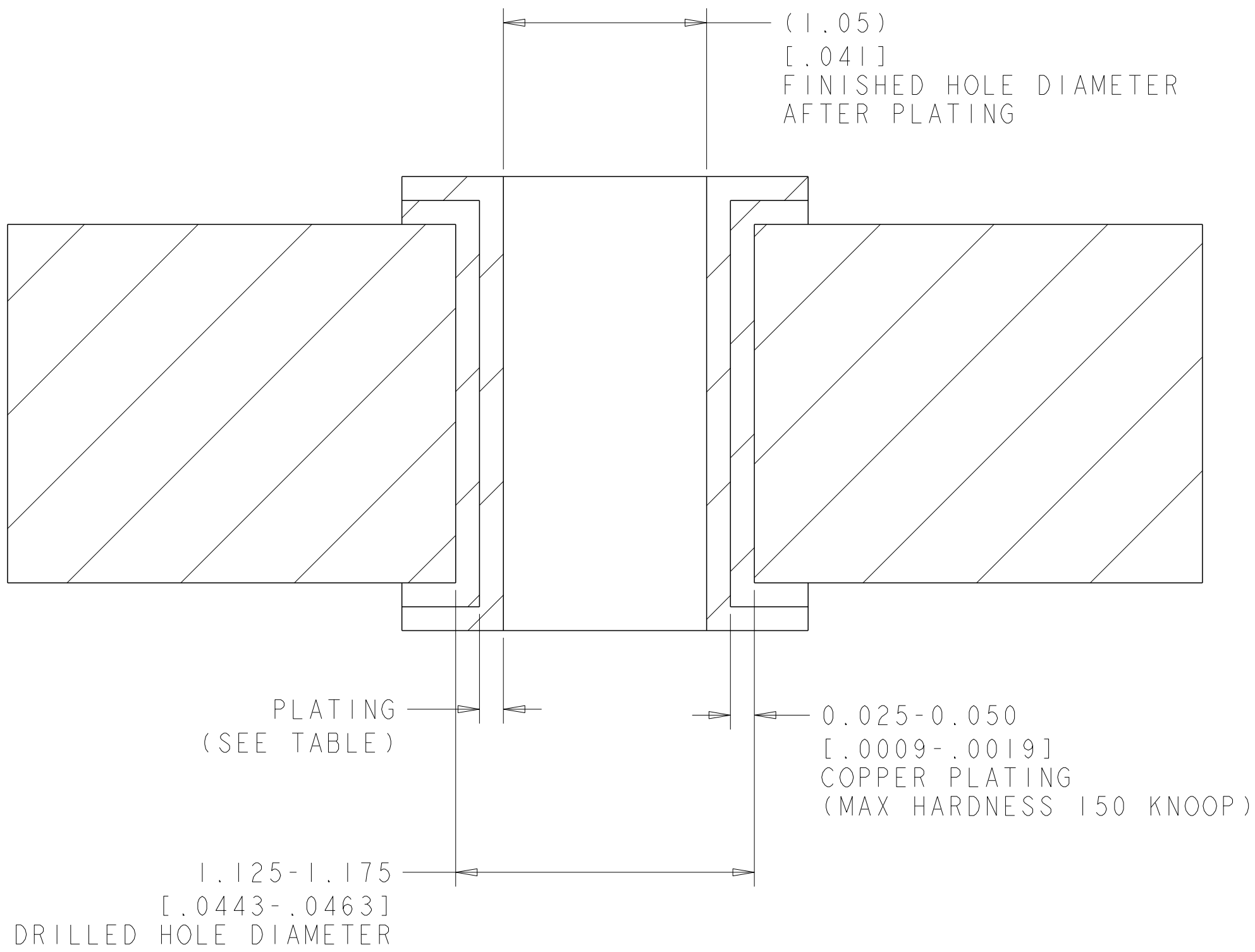
SUGGESTED PANEL OPENING 

OPTION B

THIS DRAWING IS A CONTROLLED DOCUMENT. AND COMPLIANT TO ASME Y14.5M		DWN TOWER_YU 04SEP2009		 trp CONNECTOR a bel group		DONGGUAN CHINA	
DIMENSIONS: mm		CHK KEITH_ZHU 04SEP2009				UNLESS OTHERWISE SPECIFIED:	
		MODEL NAME MAGJACK SINGLE NON-POE		DESC 1X1 7G74P2 GIGABIT TAB UP PRESSFIT W/ LED		-	
PRODUCT SPEC 108-104013		APPLICATION SPEC -		SIZE A1	CAGE CODE	DRAWING NO C=1840772	RESTRICTED TO
CUSTOMER DRAWING				SCALE 4:1	SHEET 2	OF 3	REV G



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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AND COMPLIANT TO ASME Y14.5M

DIMENSIONS:
mm

PRODUCT SPEC
108-104013

TOLERANCES UNLESS
OTHERWISE SPECIFIED:

0 PLC	±0.25
1 PLC	±0.25
2 PLC	±0.25
3 PLC	±
4 PLC	±

ANGLES
APPLICATION SPEC

-

DWN
TOWER YU
04SEP2009

CHK
KEITH ZHU
04SEP2009

APVD
KEITH ZHU
04SEP2009

MODEL NAME
MAGJACK

DESC
SINGLE NON-POE

CUSTOMER DRAWING

a bel group

DONGGUAN
CHINA

SIZE
A1

CAGE CODE
C=1840772

DRAWING NO
1840772

RESTRICTED TO
-

SCALE
1:1

SHEET
3

OF
3

REV
G