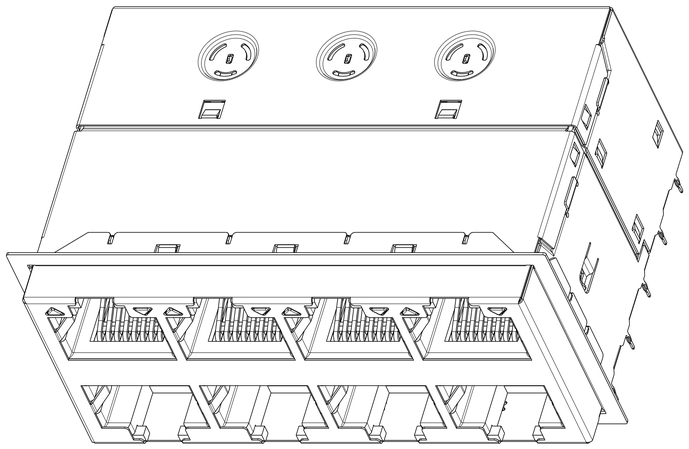
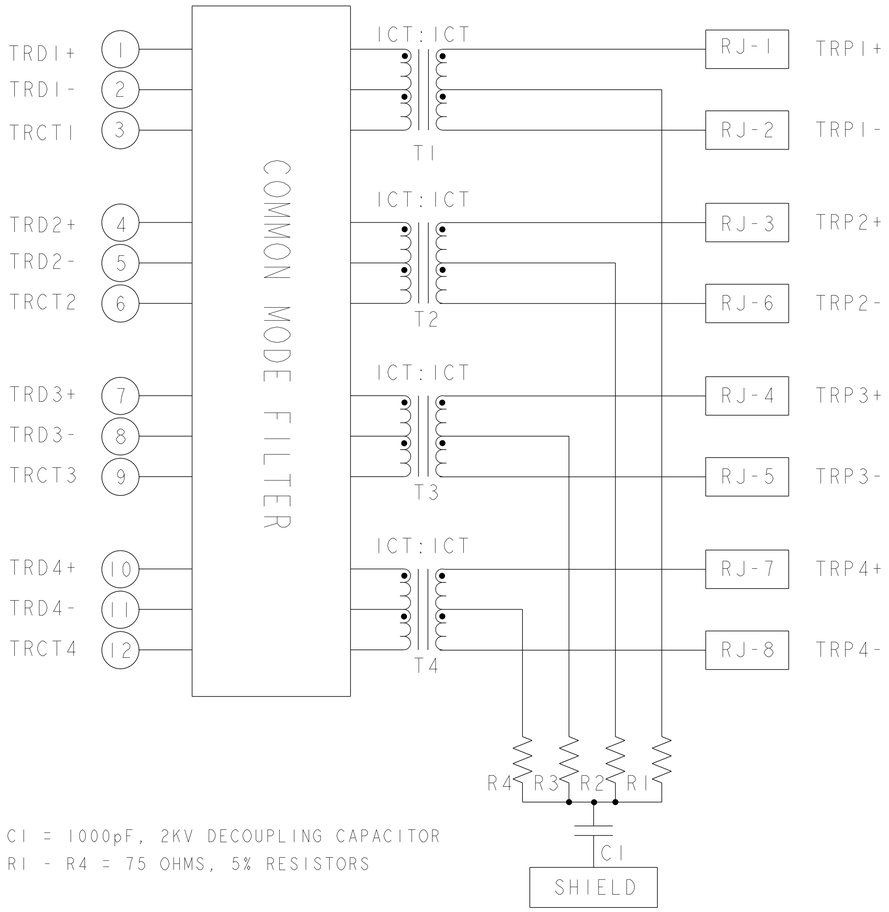
THIS DRAWING AND THE SUBJECT MATTER SHOWN THEREON ARE CONFIDENTIAL AND THE PROPERTY OF BEL/STEWART/TRP CONNECTOR AND SHALL NOT BE REPRODUCED, COPIED, OR USED IN ANY MANNER WITHOUT THE WRITTEN CONSENT OF TRP CONNECTOR.

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	LTR	DESCRIPTION	DATE	DWN	APVD
	4	SEE LAST SHEET	14MAY2021	JY	TY



S8TG31 10 GIGABIT CIRCUIT 2 3



C1 = 1000pF, 2KV DECOUPLING CAPACITOR
R1 - R4 = 75 OHMS, 5% RESISTORS

1. MATERIALS
   HOUSING: THERMOPLASTIC, BLACK, FLAMMABILITY RATING UL 94V-0
   SHIELD: NICKEL OR TIN PLATED ON COPPER ALLOY
   COMPLIANT PIN: PHOSPHOR BRONZE, PLATED WITH 2.54um MIN MATTE TIN OVER 1.27um MIN NICKEL
   CONTACT: PHOSPHOR BRONZE,WITH 1.27um MIN OVERALL NICKEL UNDERPLATE AND SELECTIVE 1.27um MIN GOLD PLATING AT MATING INTERFACE

2. MAGNETICS
   - APPLICATION: 1G/10G BASE-T
   - IMPEDANCE: 100 OHMS
   - TURNS RATIO (CHIP:CABLE): 1:1 ALL FOUR PAIRS
   - OPEN CIRCUIT INDUCTANCE (OCL): 120uH MIN @100kHz, 0.1VRMS, 19mA DC BIAS FROM 0°C TO 70°C. ALL FOUR PAIRS
   - ALL FOUR PAIRS BI-DIRECTIONAL
   - PERFORMANCE @ 25°C (WHERE f IS FREQUENCY IN MHz):
     (a) RL (MAX)
     1 MHz - 40 MHz -18 dB
     40 MHz - 400 MHz -18 + 10lg (f/40)
     400 MHz - 500MHz -8 + 30lg (f/400)

     (b) IL (MIN)
     1MHz - 400MHz -0.5-1.3*(f-1)/400
   - ISOLATION VOLTAGE: 2250VDC(MAX) FOR 60 SECONDS WITH A RISE TIME OF 500V/SEC, WITH ALL PORTS CONNECTED.

3. THE MAGNETIC CIRCUIT ON ALL FOUR CHANNELS IS SYMMETRICAL AND SUPPORTS AUTO-MDIX OPERATION.

4. OPERATING TEMPERATURE: 0°C - 70°C.

5. DATUM Y AND BASIC DIMENSION ESTABLISHED BY CUSTOMER.

6. RJ45 CAVITY CONFORMS TO FCC RULES AND REGULATION PART 68 SUBPART F.

7. TRP CONNECTOR LOGO,PART NUMBER,DATE CODE,COUNTRY OF ORIGIN, AGENCY APPROVAL MARKING IN APPROPRIATE LOCATION SHOWN.
   DATE CODE: YYWWD WHERE "YY" IS YEAR, "WW" IS WORK WEEK, "D" IS DAY OF WEEK, WITH SUNDAY= 1

8. PANEL SEATING LOCATION WITH RESPECT TO CUSTOMER PCB EDGE.

9. THE FINISHED GOODS IS WITHOUT SMD LED, THE SMD LED IS PROVIDED BY CUSTOMER HERSELF, AND THE SMD LED IS MOUNTED ON CUSTOMER PCB.

10. FOR HOLE SIZE AND PLATINGS, SEE SHEET 4.

DESIGN PROPOSAL

CONTACT TRP FOR AVAILABILITY STATUS

2250257-1
PART NUMBER

THIS DRAWING IS A CONTROLLED DOCUMENT. AND COMPLIANT TO ASME Y14.5M

DIMENSIONS: mm

TOLERANCES UNLESS OTHERWISE SPECIFIED:
0 PLC ±0.25
1 PLC ±0.25
2 PLC ±0.25
3 PLC ±0.25
4 PLC ±-
ANGLES ±-

PRODUCT SPEC: 108-104017
APPLICATION SPEC: -

DWN 02DEC2014 RICK LI / LIGHT CHEN
CHK 02DEC2014 TOMMY REN / BILL LIU
APVD 02DEC2014 TONY YUAN

trp CONNECTOR a bel group — DONGGUAN CHINA

MODEL NAME: MAGJACK STACK NON-PoE

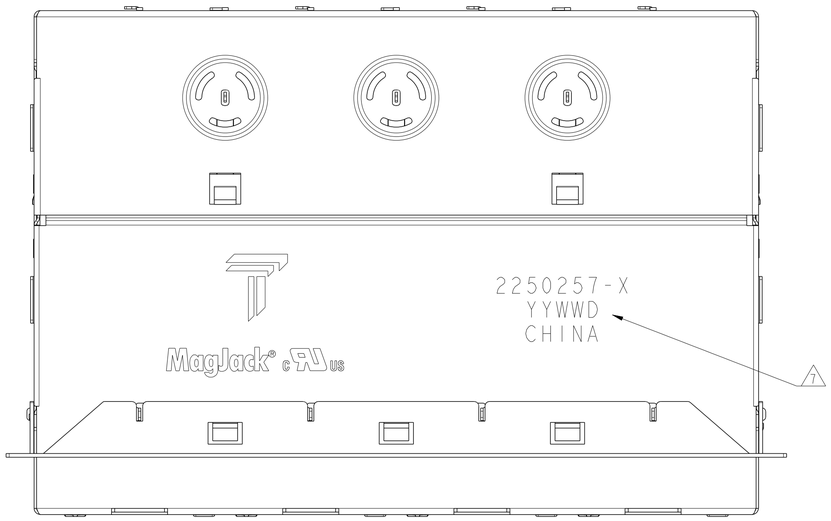
DESC: 2X4, S8TG31 10G CIRCUIT, PRESS FIT, WITH LIGHT PIPE

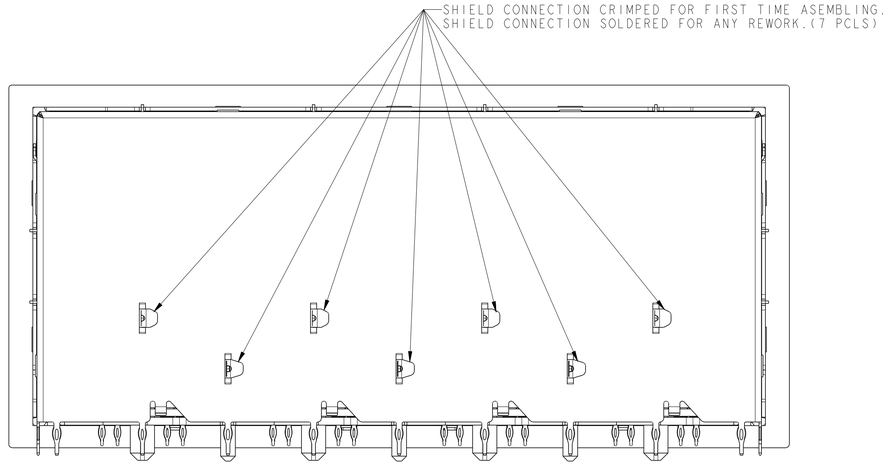
SIZE A1 | CAGE CODE | DRAWING NO C=2250257 | RESTRICTED TO -

Customer Drawing | SCALE NTS | SHEET 1 OF 6 | REV 4

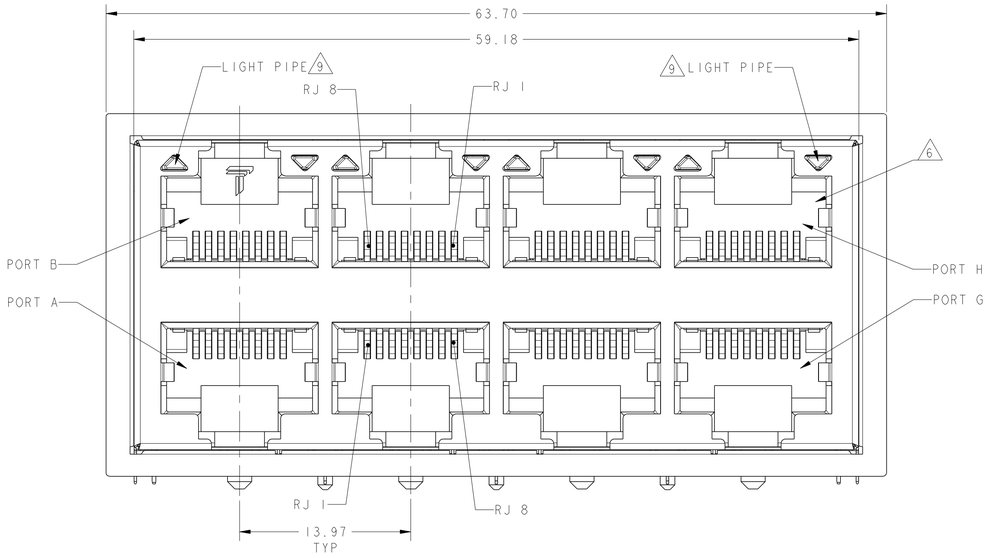
Please read our datasheet & drawing disclaimer here.

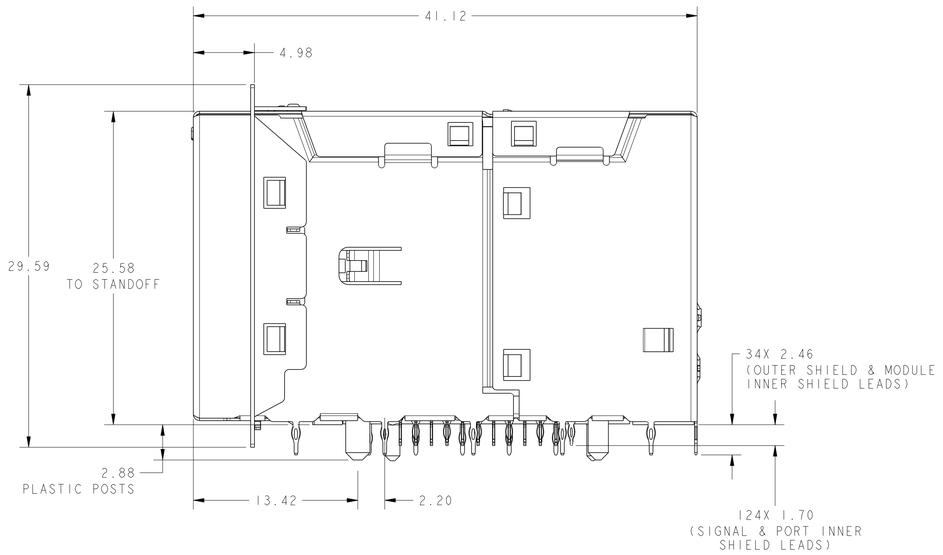
© COPYRIGHT TRP connector ALL RIGHTS RESERVED





BACK VIEW

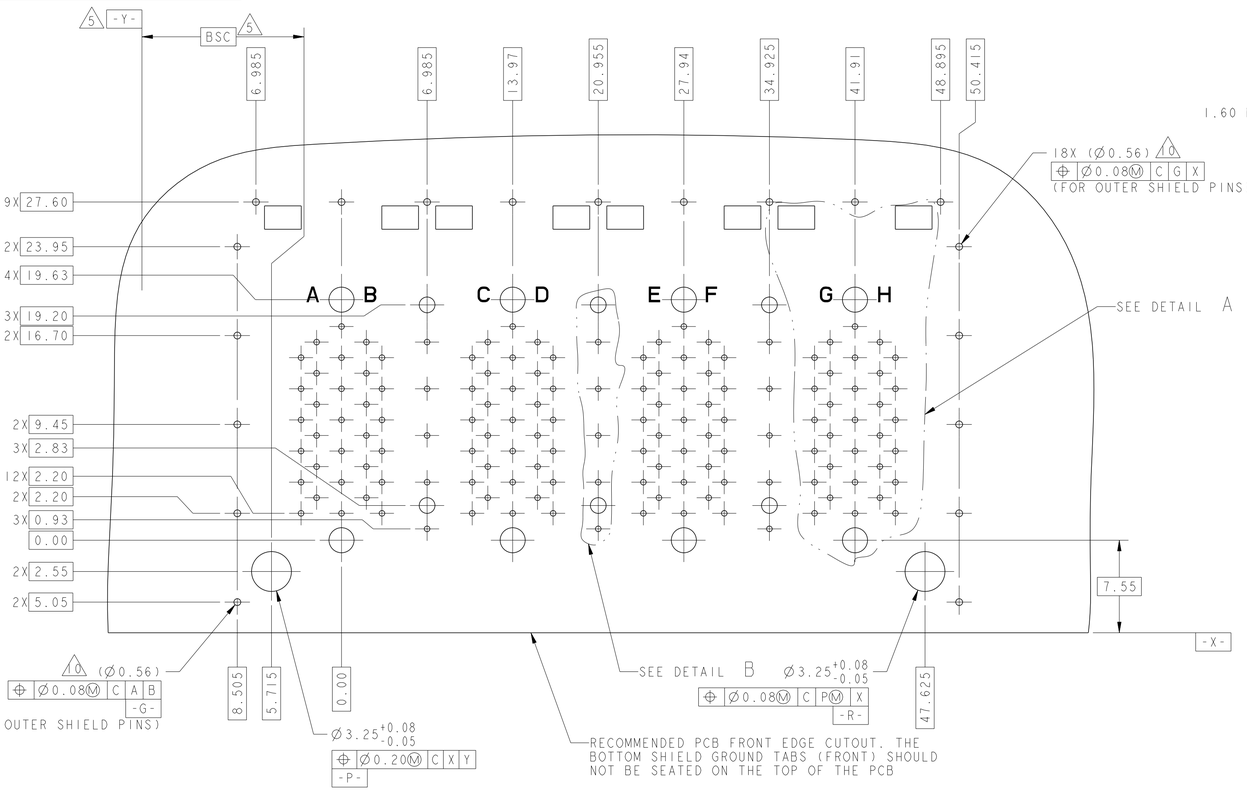




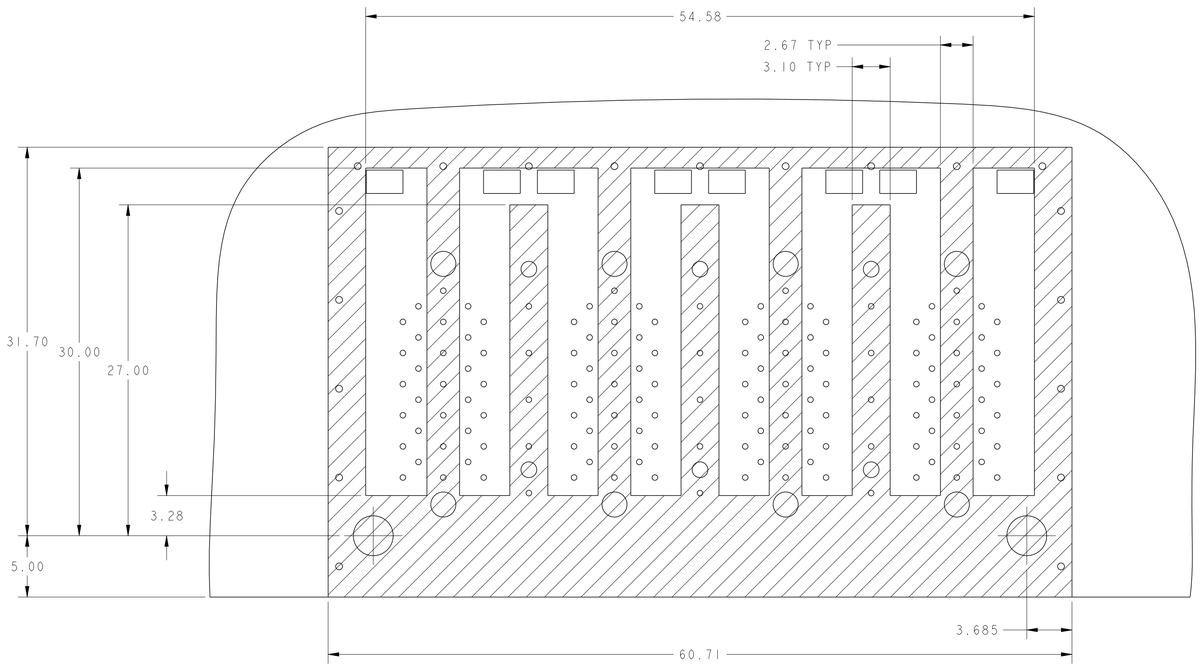
THIS DRAWING IS A CONTROLLED DOCUMENT. AND COMPLIANT TO ASME Y14.5M		DWN 02DEC2014 RICK LI / LIGHT CHEN	trp CONNECTOR a bel group — DONGGUAN CHINA
DIMENSIONS: mm	TOLERANCES UNLESS OTHERWISE SPECIFIED: 0 PLC ±0.25, 1 PLC ±0.25, 2 PLC ±0.25, 3 PLC ±0.25, 4 PLC ±', ANGLES ±'	CHK 02DEC2014 TOMMY REN / BILL LIU	DESC 2X4, S8TG31 10G CIRCUIT, PRESS FIT, WITH LIGHT PIPE
		APVD 02DEC2014 TONY YUAN	MODEL NAME MAGJACK STACK NON-PoE
PRODUCT SPEC 108-104017	APPLICATION SPEC -		SIZE A1 · CAGE CODE · DRAWING NO C-2250257 · RESTRICTED TO -
		Customer Drawing	SCALE NTS · SHEET 2 OF 6 · REV 4

xxxxx

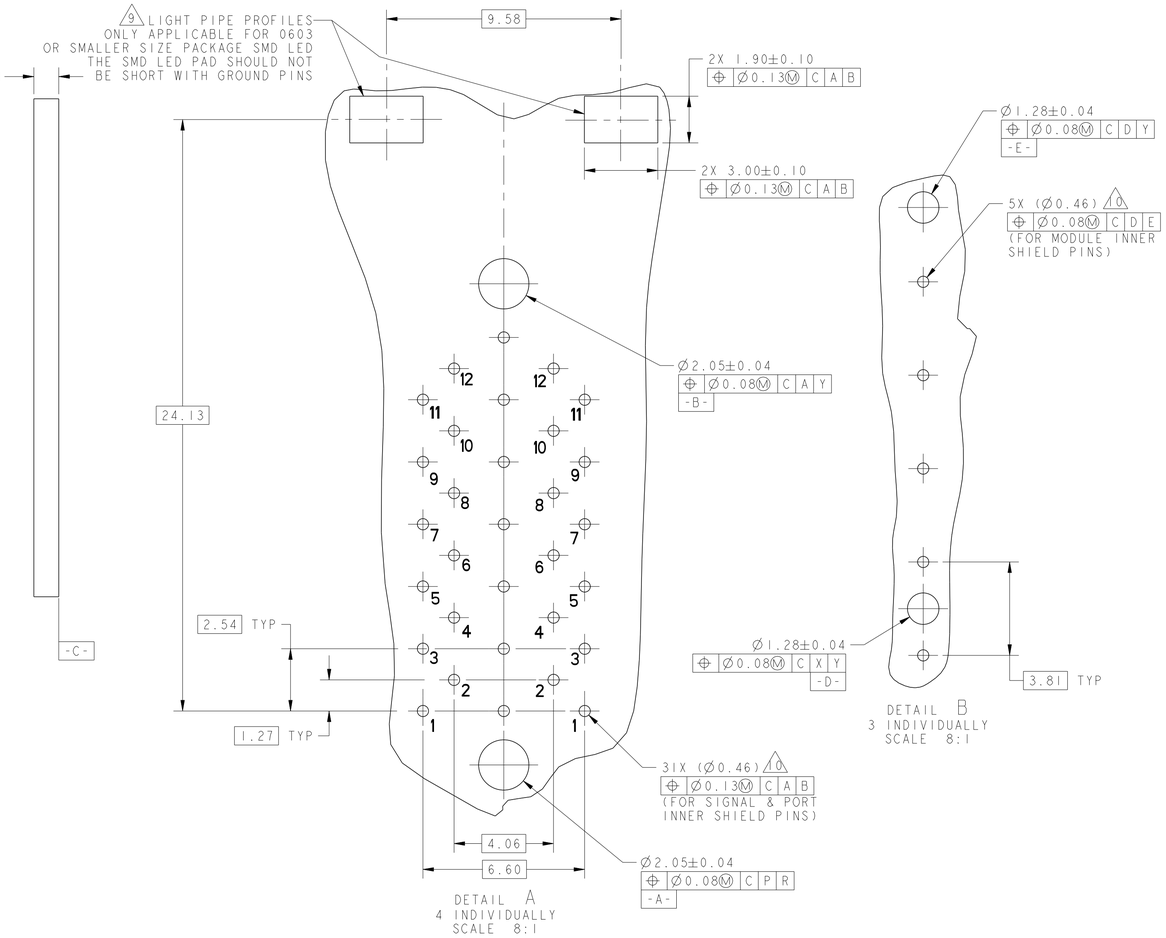
© COPYRIGHT TRP connector ALL RIGHTS RESERVED



RECOMMENDED PC BOARD LAYOUT
(VIEW FROM COMPONENT SIDE)



THE SHADED AREA ON THE CUSTOMER BOARD ARE RECOMMENDED TO BE CLEAR OF ANY VIA HOLE OR COMPONENT PAD



THIS DRAWING IS A CONTROLLED DOCUMENT. AND COMPLIANT TO ASME Y14.5M

DIMENSIONS: mm

TOLERANCES UNLESS OTHERWISE SPECIFIED:
0 PLC ±0.25
1 PLC ±0.25
2 PLC ±0.25
3 PLC ±0.25
4 PLC ±-
ANGLES ±-

PRODUCT SPEC: 108-104017
APPLICATION SPEC: -

DWN 02DEC2014 RICK LI / LIGHT CHEN
CHK 02DEC2014 TOMMY REN / BILL LIU
APVD 02DEC2014 TONY YUAN

MODEL NAME: MAGJACK STACK NON-PoE

trp CONNECTOR a bel group — DONGGUAN CHINA

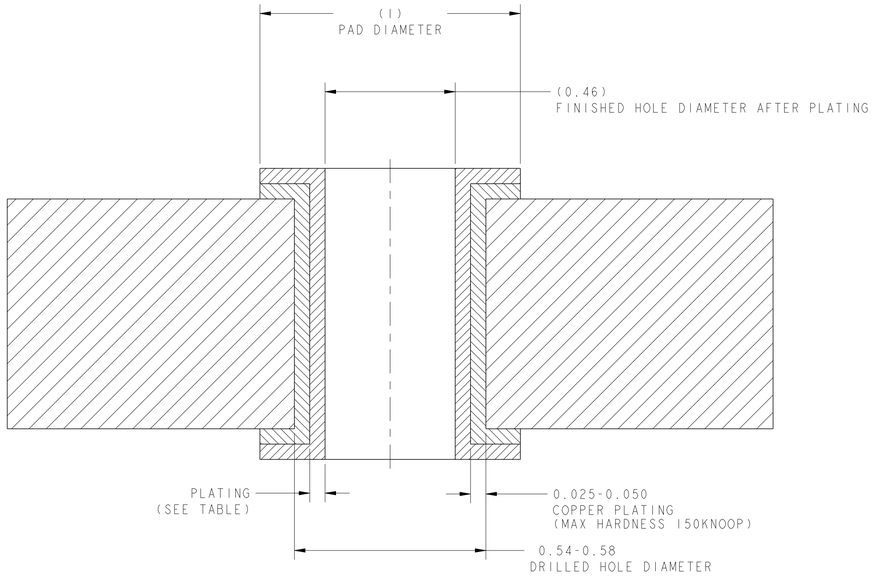
DESC: 2X4, S8TG31 10G CIRCUIT, PRESS FIT, WITH LIGHT PIPE

SIZE	CAGE CODE	DRAWING NO	RESTRICTED TO
A1		C-2250257	-

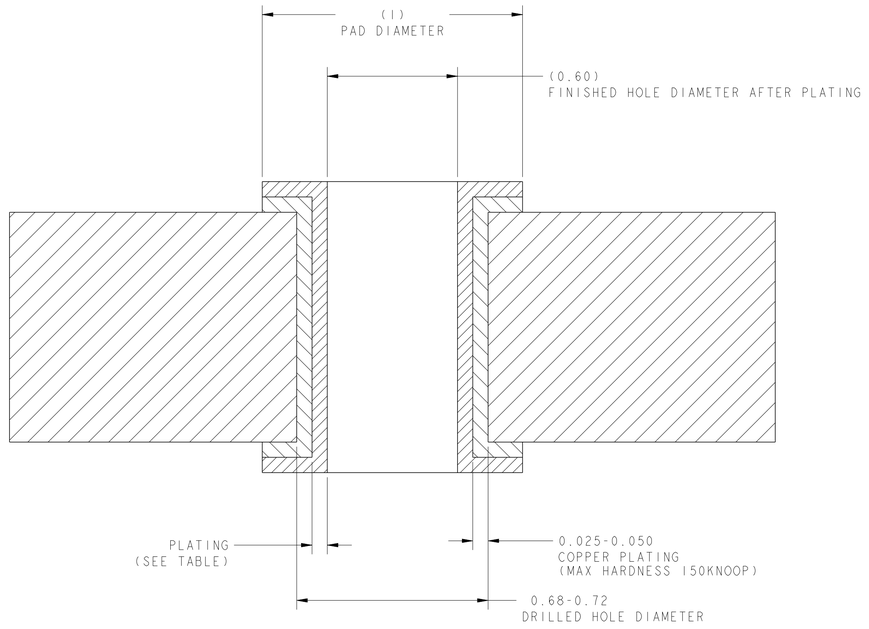
Customer Drawing | SCALE NTS | SHEET 3 OF 6 | REV 4

xxxxx

© COPYRIGHT TRP connector ALL RIGHTS RESERVED



RECOMMENDED HOLE DIMENSIONS
FOR SIGNAL & INNER SHIELD CONTACTS



RECOMMENDED HOLE DIMENSIONS
FOR OUTER 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)

THIS DRAWING IS A CONTROLLED DOCUMENT.
AND COMPLIANT TO ASME Y14.5M

DIMENSIONS: mm

TOLERANCES UNLESS OTHERWISE SPECIFIED:
0 PLC ±0.25
1 PLC ±0.25
2 PLC ±0.25
3 PLC ±0.25
4 PLC ±·
ANGLES ±·

PRODUCT SPEC: 108-104017
APPLICATION SPEC: -

DWN 02DEC2014 RICK LI / LIGHT CHEN
CHK 02DEC2014 TOMMY REN / BILL LIU
APVD 02DEC2014 TONY YUAN

trp CONNECTOR a bel group — DONGGUAN CHINA

MODEL NAME: MAGJACK STACK NON-PoE

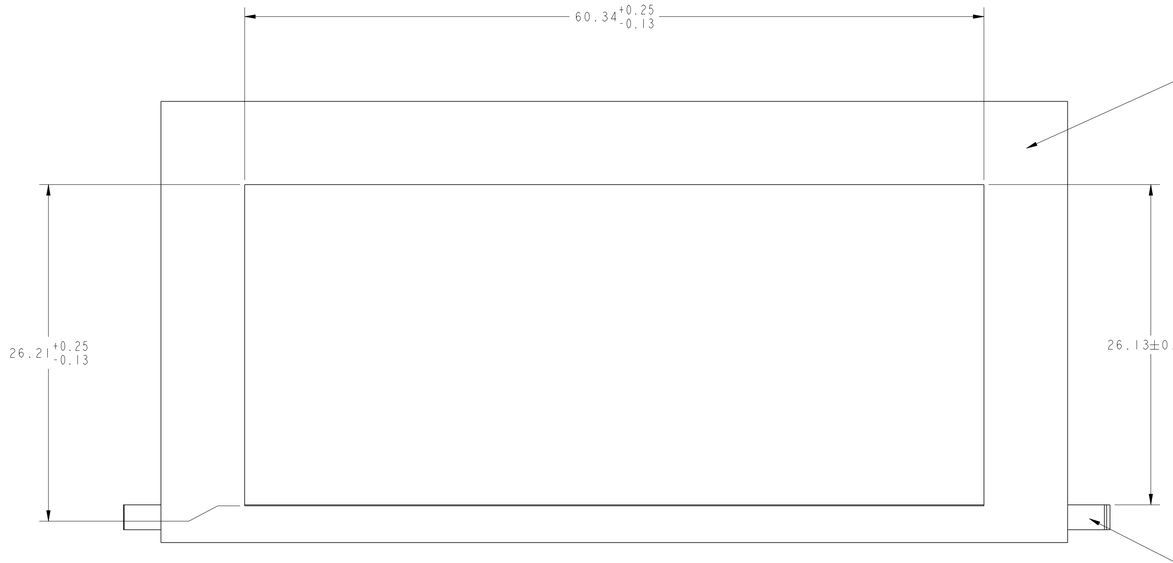
DESC: 2X4, S8TG31 10G CIRCUIT, PRESS FIT, WITH LIGHT PIPE

SIZE: A1 | CAGE CODE | DRAWING NO: C-2250257 | RESTRICTED TO: -

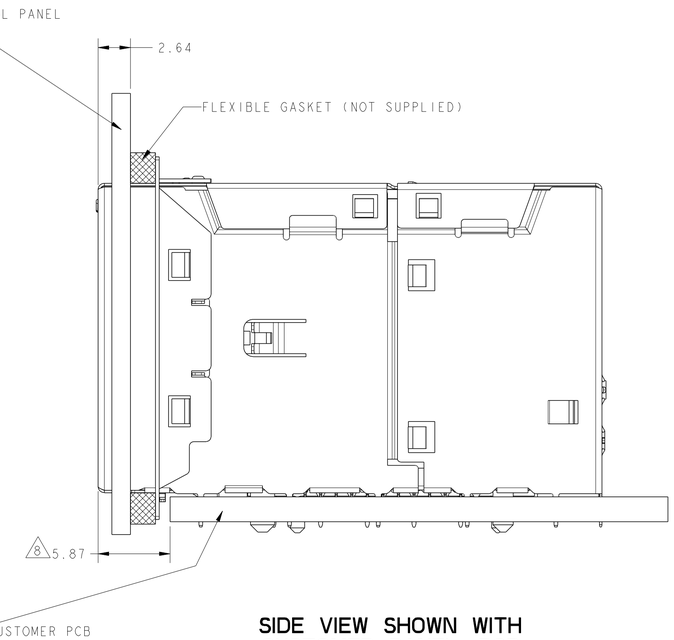
Customer Drawing | SCALE NTS | SHEET 4 OF 6 | REV 4

xxxxx

© COPYRIGHT TRP connector ALL RIGHTS RESERVED



RECOMMENDED PANEL CUTOUT DIMENSIONS



SIDE VIEW SHOWN WITH CUSTOMER PANEL, PCB

NOTE:
1. THE DISTANCE OF PANEL INSIDE SURFACE RELATIVE TO FRONT SURFACE OF PART IS ONLY A SUGGESTION, IN CASE THIS DISTANCE IS DIFFERENT, THE REQUIRED PANEL OPENING DIMENSIONS CHANGE ACCORDINGLY.
2. RECOMMENDED FLEXIBLE GASKET THICKNESS BEFORE COMPRESSION OF 3.4mm.
3. RECOMMENDED COMPRESSION OF THE FLEXIBLE GASKET MATERIAL OF 15% TO 40%.
4. 2.IPSI OF FORCE BETWEEN THE EMI-FLANGE AND PANEL @ 25% COMPRESSION

THIS DRAWING IS A CONTROLLED DOCUMENT. AND COMPLIANT TO ASME Y14.5M

DIMENSIONS: mm

TOLERANCES UNLESS OTHERWISE SPECIFIED:
0 PLC ±0.25
1 PLC ±0.25
2 PLC ±0.25
3 PLC ±0.25
4 PLC ±-
ANGLES ±-

PRODUCT SPEC 108-104017

APPLICATION SPEC -

DWN 02DEC2014 RICK LI / LIGHT CHEN
CHK 02DEC2014 TOMMY REN / BILL LIU
APVD 02DEC2014 TONY YUAN

MODEL NAME MAGJACK STACK NON-PoE

trp CONNECTOR abel group DONGGUAN CHINA

DESC 2X4, S8TG3I 10G CIRCUIT, PRESS FIT, WITH LIGHT PIPE

SIZE	CAGE CODE	DRAWING NO	RESTRICTED TO
A1		C-2250257	-

Customer Drawing | SCALE NTS | SHEET 5 OF 6 | REV 4

xxxxx

© COPYRIGHT TRP connector ALL RIGHTS RESERVED

2250257					STOCK DISPOSITION			
2X4, S8TG31 10G CIRCUIT,PRESS FIT, WITH LIGHT PIPE					A: CONTINUE AS IS B: REWORK C: SCRAP		D: USE OLD FIRST E: PARTS TO CONFORM F: OTHER	
REVISION HISTORY								
DATE	REV	CHANGES	REASON	APPROVAL	INVENTORY (A,B,C,D,E,F)	WORK IN PROCESS (A,B,C,F)	SUPPLIER ORDERS (A,E,F)	OPEN CUST ORDERS (A,E,F)
14MAY2021	4	1.CHANGE HOUSING POSTS TO MAG CASE POSTS AND INNER SHIELD POSTS. 2.UPDATE MAGNETICS FOR OCL AND RL (MAX).	PRODUCT OPTIMIZE	TONY YUAN	-	-	-	-

THIS DRAWING IS A CONTROLLED DOCUMENT.
AND COMPLIANT TO ASME Y14.5M

DIMENSIONS: mm

TOLERANCES UNLESS OTHERWISE SPECIFIED:
0 PLC ±0.25
1 PLC ±0.25
2 PLC ±0.25
3 PLC ±0.25
4 PLC ±
ANGLES ±

PRODUCT SPEC: 108-104017
APPLICATION SPEC: -

DWN 02DEC2014 RICK LI / LIGHT CHEN
CHK 02DEC2014 TOMMY REN / BILL LIU
APVD 02DEC2014 TONY YUAN

trp CONNECTOR a bel group — DONGGUAN CHINA

MODEL NAME: MAGJACK STACK NON-PoE

DESC: 2X4, S8TG31 10G CIRCUIT, PRESS FIT, WITH LIGHT PIPE

SIZE	CAGE CODE	DRAWING NO	RESTRICTED TO
A1		C-2250257	-

Customer Drawing

SCALE	SHEET	OF	REV
NTS	6	6	4

xxxxx