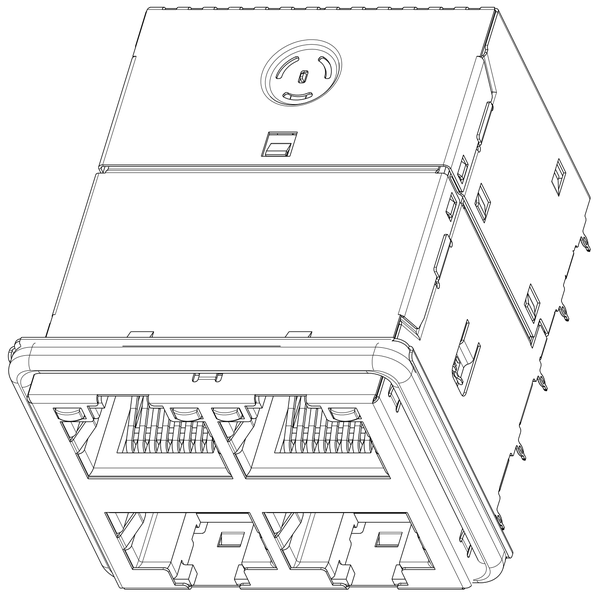
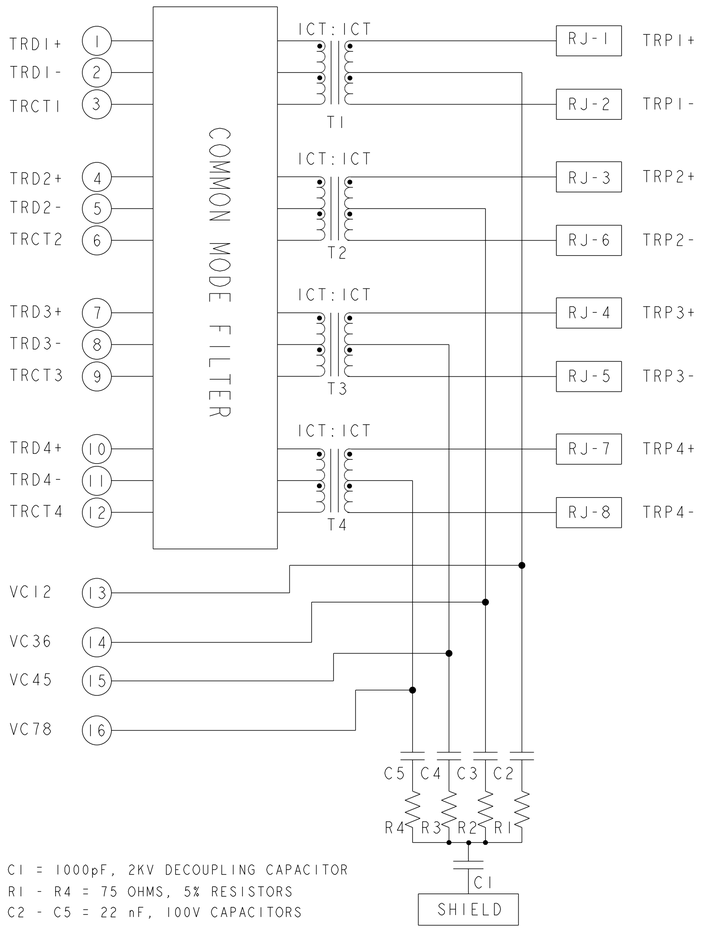
THIS DRAWING AND THE SUBJECT MATTER SHOWN THEREON ARE CONFIDENTIAL AND THE PROPERTY OF BEL/STEWART/TRP CONNECTOR AND SHALL NOT BE REPRODUCED, COPIED, OR USED IN ANY MANNER WITHOUT THE WRITTEN CONSENT OF TRP CONNECTOR.

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
	3	SEE LAST SHEET	02DEC2020	JY	TY



S9HTG08ET 10G 4PPoE CIRCUIT△2△3



C1 = 1000pF, 2KV DECOUPLING CAPACITOR
R1 - R4 = 75 OHMS, 5% RESISTORS
C2 - C5 = 22 nF, 100V CAPACITORS

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/2.5G/5G/10G BASE-T, EXTENDED TEMPERATURE
- 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 -40°C TO 85°C. ALL FOUR PAIRS
- ALL FOUR PAIRS BI-DIRECTIONAL
- PoE CURRENT: 600mADC
- PERFORMANCE @ 25°C (WHERE f IS FREQUENCY IN MHz)
  (a) INSERTION LOSS (IL):
  1 MHz TO 400 MHz -0.5-1.3*(f-1)/400 dB MIN
  (b) RETURN LOSS (RL):
  1 MHz TO 100 MHz -17 dB MAX
  100 MHz TO 500 MHz -17 + 20.75LOG10(f/100) dB MAX
  (c) CROSSTALK ATTENUATION:
  1 MHz TO 500 MHz -20 dB MAX
  (d) COMMON MODE REJECTION:
  1 MHz TO 500 MHz -16 dB MAX
- ISOLATION VOLTAGE: 2250VDC 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: -40°C - 85°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.

2250681-1
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 10JAN2020 JARRY YE / TERRY LIN
CHK 10JAN2020 TOWER YU / BILL LIU
APVD 10JAN2020 TONY YUAN

trp CONNECTOR a bel group — DONGGUAN CHINA

MODEL NAME: MAGJACK STACK 4PPoE
DESC: 2X2, S9HTG08ET 10G 60W 4PPoE WITH LIGHT PIPE
SIZE: A1 | CAGE CODE | DRAWING NO: C=2250681 | RESTRICTED TO: -
CUSTOMER DRAWING | SCALE NTS | SHEET 1 OF 6 | REV 3

Please read our datasheet & drawing disclaimer here.

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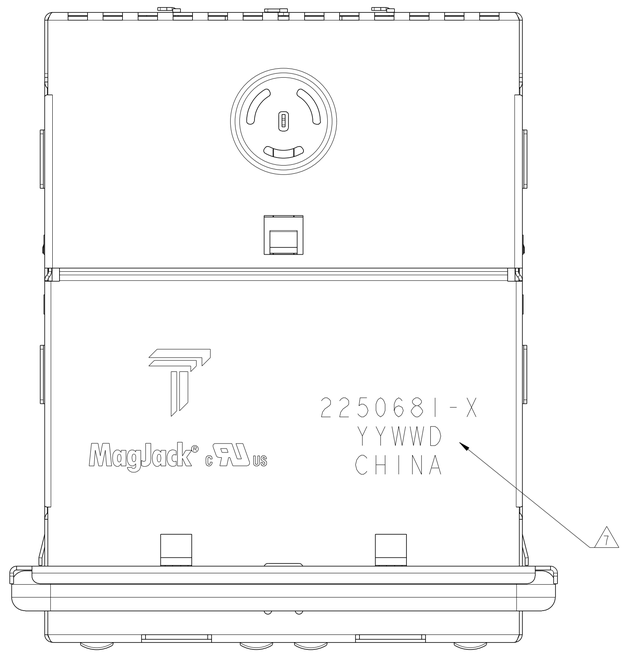

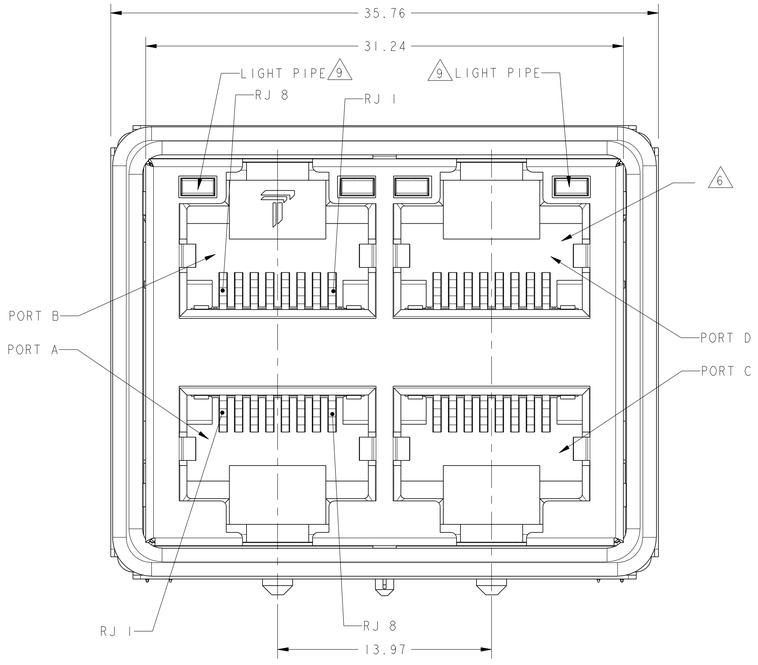

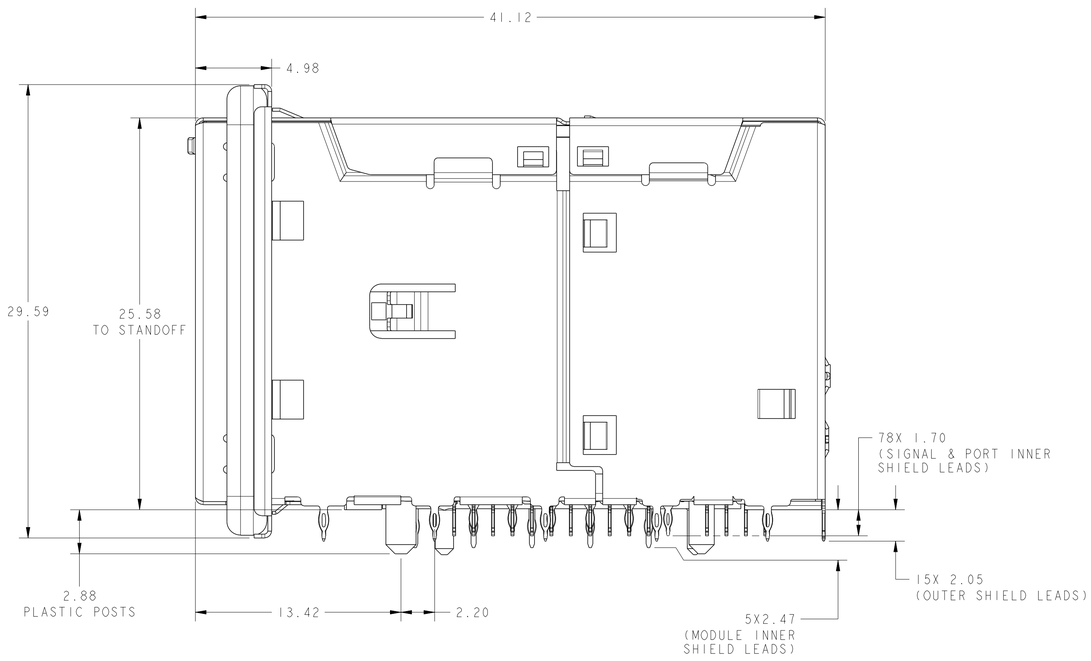

THIS DRAWING IS A CONTROLLED DOCUMENT. AND COMPLIANT TO ASME Y14.5M	DWN 10JAN2020 JARRY YE / TERRY LIN	trp CONNECTOR a bel group	DONGGUAN CHINA
DIMENSIONS: mm	CHK 10JAN2020 TOWER YU / BILL LIU		
TOLERANCES UNLESS OTHERWISE SPECIFIED: 0 PLC ±0.25, 1 PLC ±0.25, 2 PLC ±0.25, 3 PLC ±0.25, 4 PLC ±, ANGLES ±.	APVD 10JAN2020 TONY YUAN	DESC 2X2, S9HTG08ET 10G 60W 4PPoE WITH LIGHT PIPE	
PRODUCT SPEC 108-104017	APPLICATION SPEC -	MODEL NAME MAGJACK STACK 4PPoE	SIZE A1 / CAGE CODE / DRAWING NO C-2250681 / RESTRICTED TO -
		CUSTOMER DRAWING	SCALE NTS / SHEET 2 OF 6 / REV 3

xxxxx

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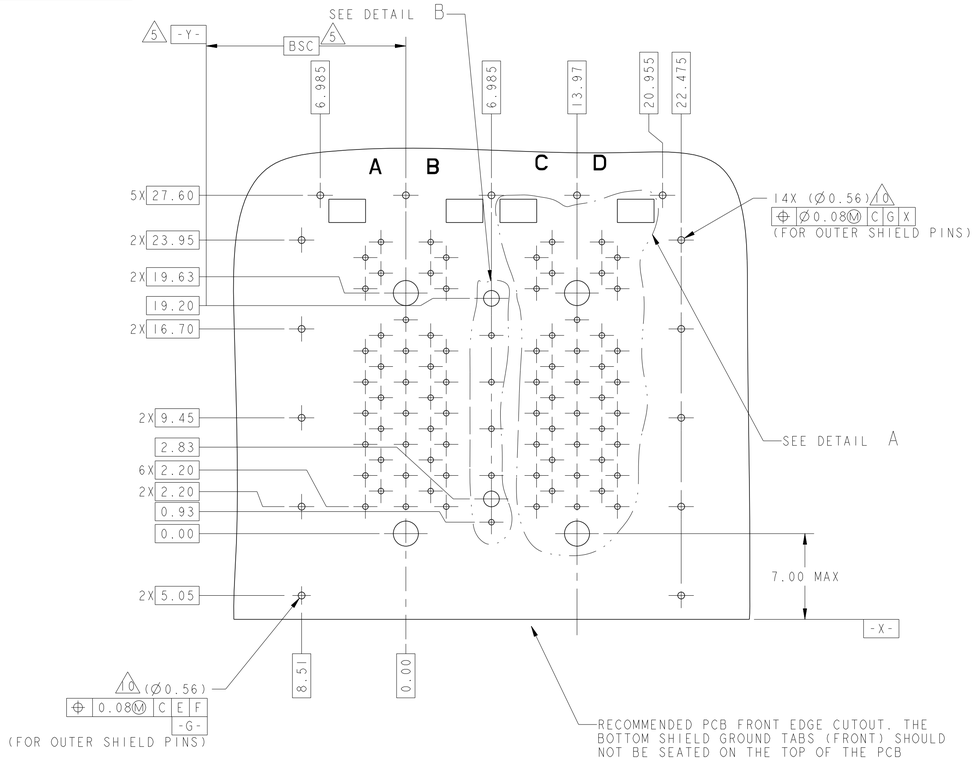
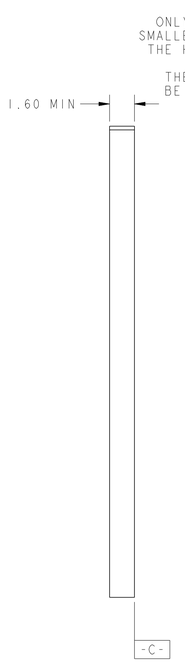
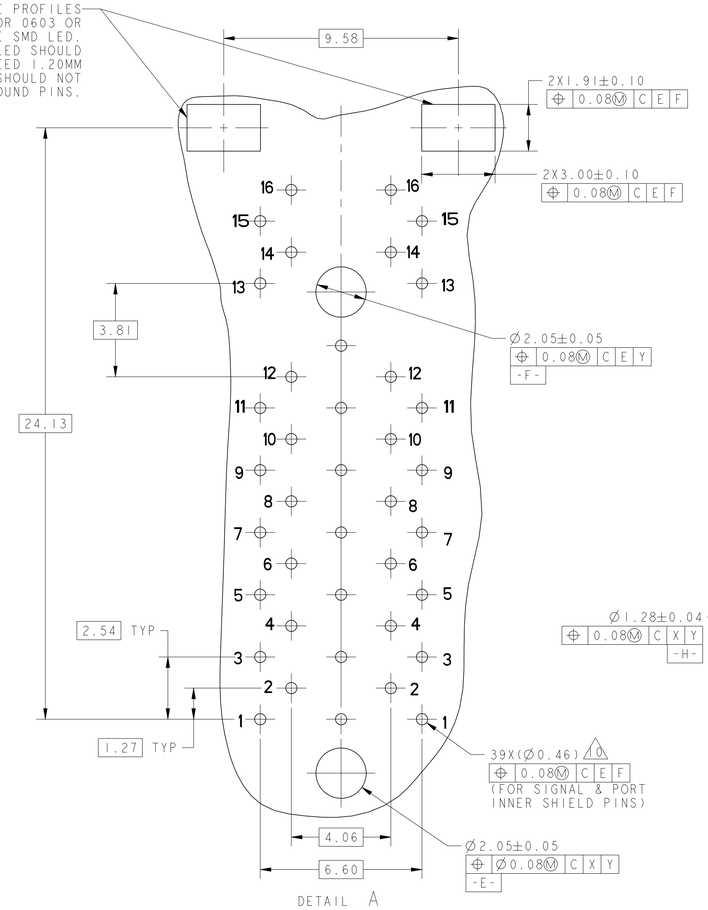
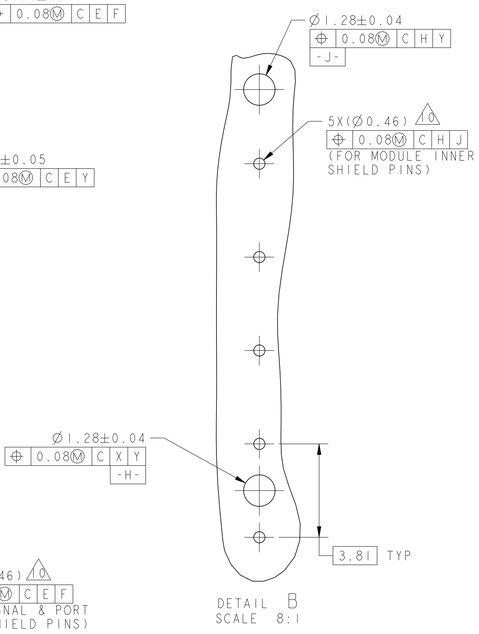


RECOMMENDED PC BOARD LAYOUT (VIEW FROM COMPONENT SIDE)

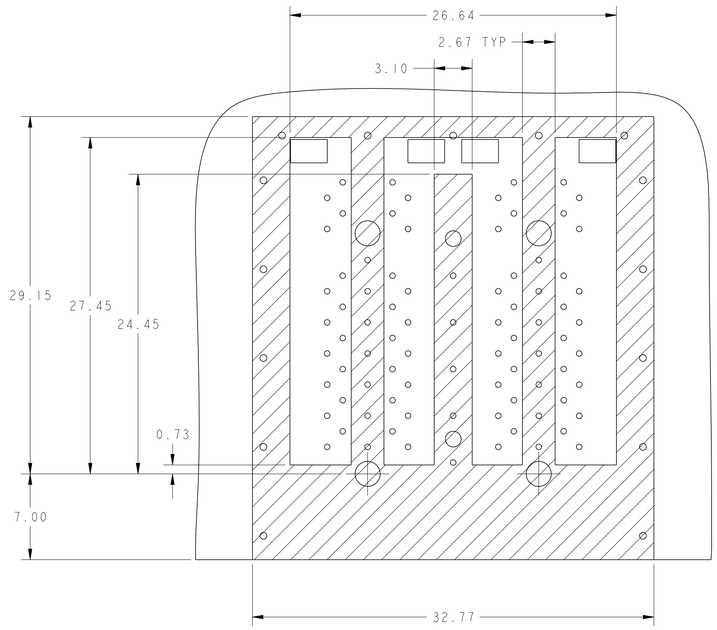




DETAIL A
SCALE 8:1
2 PLC



DETAIL B
SCALE 8:1



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		DWN 10JAN2020 JARRY YE / TERRY LIN	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 10JAN2020 TOWER YU / BILL LIU	DESC 2X2, S9HTG08ET 10G 60W 4PPoE WITH LIGHT PIPE
PRODUCT SPEC 108-104017	APPLICATION SPEC -	APVD 10JAN2020 TONY YUAN	MODEL NAME MAGJACK STACK 4PPoE
			SIZE A1 / CAGE CODE / DRAWING NO C-2250681 / RESTRICTED TO -
			CUSTOMER DRAWING / SCALE NTS / SHEET 3 OF 6 / REV 3

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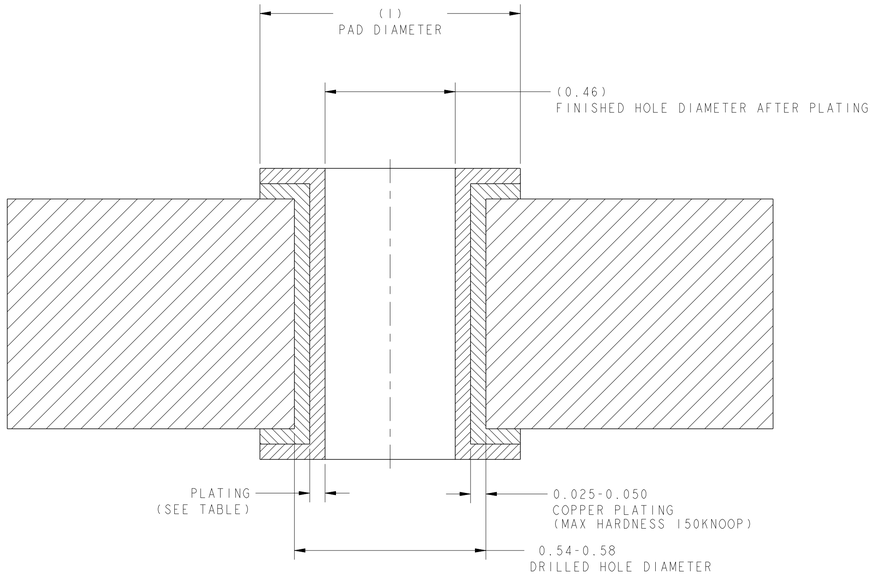
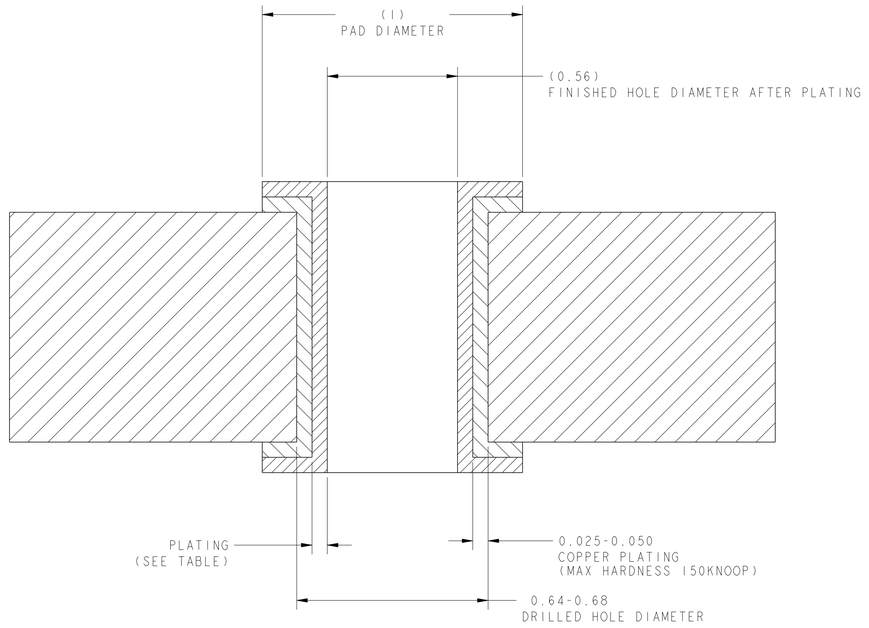


RECOMMENDED HOLE DIMENSIONS
FOR SIGNAL & INNER SHIELD CONTACTS



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)

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DIMENSIONS: mm

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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 10JAN2020 JARRY YE / TERRY LIN
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trp CONNECTOR a bel group — DONGGUAN CHINA

MODEL NAME: MAGJACK STACK 4PPoE

DESC: 2X2, S9HTG08ET 10G 60W 4PPoE WITH LIGHT PIPE

SIZE: A1 | CAGE CODE | DRAWING NO: C-2250681 | RESTRICTED TO: -

CUSTOMER DRAWING | SCALE NTS | SHEET 4 OF 6 | REV 3

xxxxx

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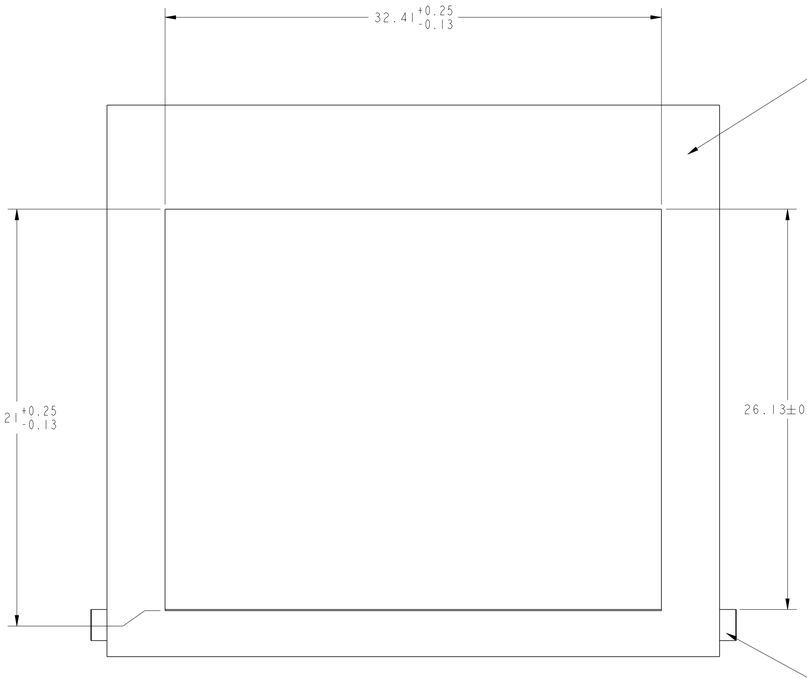
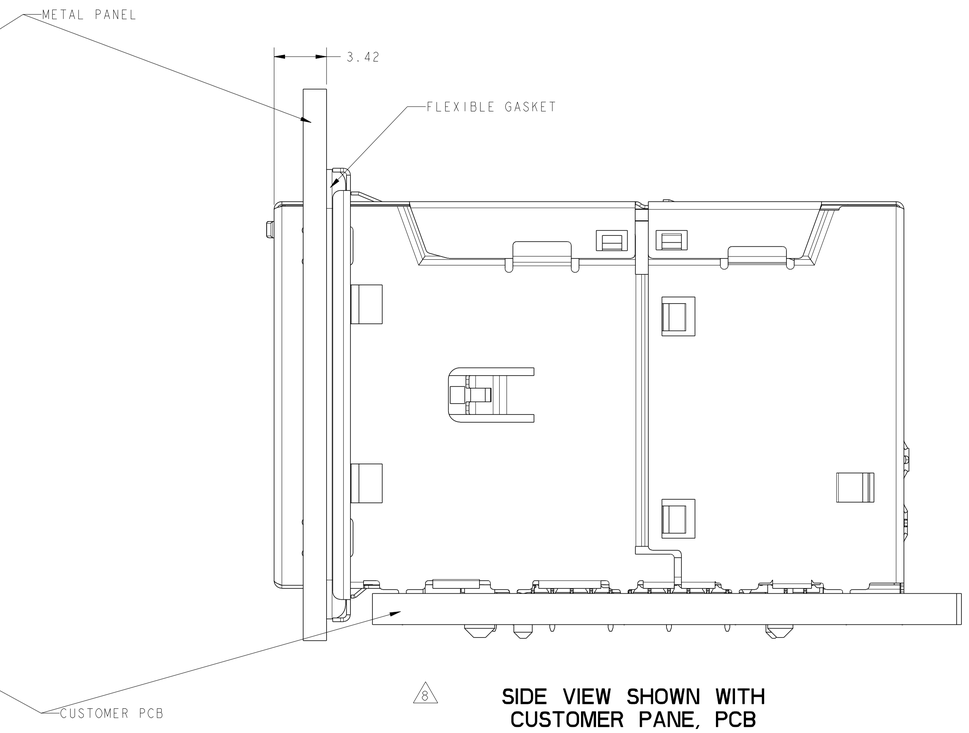


RECOMMENDED PANEL CUTOUT DIMENSIONS



8

SIDE VIEW SHOWN WITH CUSTOMER PANE, PCB

THIS DRAWING IS A CONTROLLED DOCUMENT. AND COMPLIANT TO ASME Y14.5M	DWN 10JAN2020 JARRY YE / TERRY LIN	trp CONNECTOR a bel group	DONGGUAN CHINA
DIMENSIONS: mm	CHK 10JAN2020 TOWER YU / BILL LIU		
TOLERANCES UNLESS OTHERWISE SPECIFIED: 0 PLC ±0.25 1 PLC ±0.25 2 PLC ±0.25 3 PLC ±0.25 4 PLC ±- ANGLES ±-	APVD 10JAN2020 TONY YUAN	MODEL NAME MAGJACK STACK 4PPoE	DESC 2X2, S9HTG08ET 10G 60W 4PPoE WITH LIGHT PIPE
PRODUCT SPEC 108-104017	APPLICATION SPEC -	SIZE A1 / CAGE CODE / DRAWING NO C-2250681	RESTRICTED TO -
CUSTOMER DRAWING		SCALE NTS	SHEET 5 OF 6 REV 3

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2250681					STOCK DISPOSITION			
2X2, S9HTG08ET 10G 60W 4PPoE, 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)
10JAN2020	1	-	INITIAL RELEASE	TONY YUAN	-	-	-	-
04AUG2020	2	SHEET 2 : 1A, CHANGE DIMENSION 20X2.46 TO 5X2.47 ADD DIMENSION 15X2.05 SHEET 3 : 5C, CHANGE DIMENSION 7.55 TO 7.00	DESIGN CHANGE	TONY YUAN	-	-	-	-
02DEC2020	3	NOTE 2: REMOVED "160uH MIN @100kHz, 0.1VRMS,FROM -40°C TO 85°C, ALL FOUR PAIRS."	DRAWING CLARIFICATION	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 10JAN2020 JARRY YE / TERRY LIN

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MODEL NAME: MAGJACK STACK 4PPoE

trp CONNECTOR a bel group — DONGGUAN CHINA

DESC: 2X2, S9HTG08ET 10G 60W 4PPoE WITH LIGHT PIPE

SIZE	CAGE CODE	DRAWING NO	RESTRICTED TO
A1		C-2250681	-

CUSTOMER DRAWING

SCALE	SHEET	OF	REV
NTS	6	6	3

xxxxx