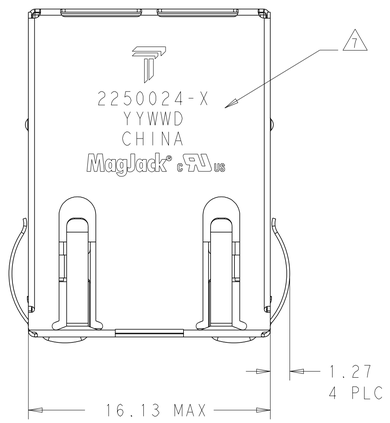
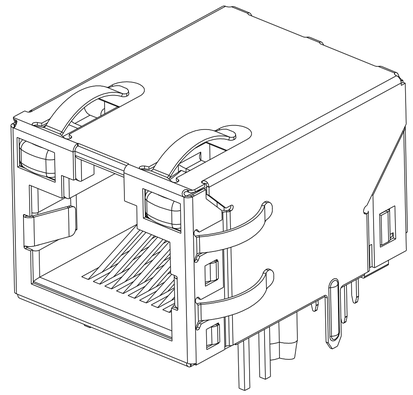
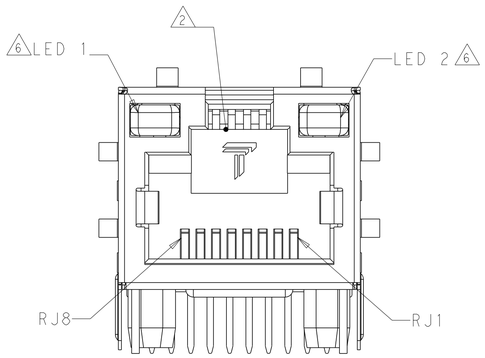
THIS DRAWING AND THE SUBJECT MATTER SHOWN THEREON ARE CONFIDENTIAL AND THE PROPERTY OF BEL/STEWART/TRP CONNECTOR AND SHALL NOT BE REPRODUCED, COPIED, OR USED IN ANY MANNER WITHOUT THE WRITTEN CONSENT OF TRP CONNECTOR.

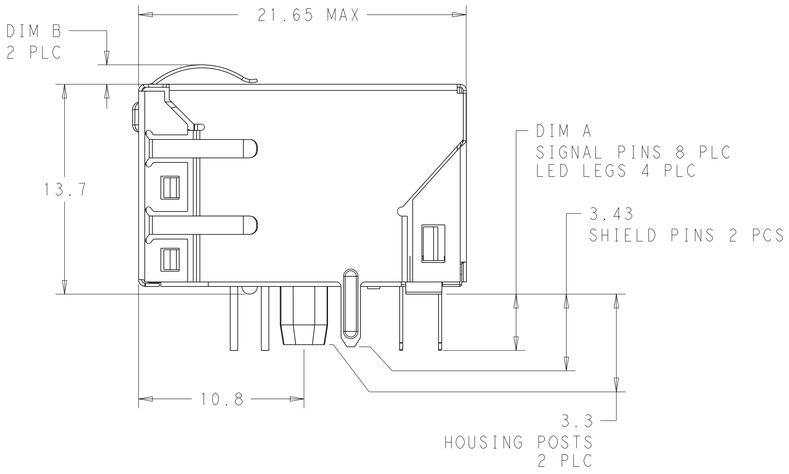
PRODUCT MAY BE PROTECTED BY ONE OR MORE OF THE FOLLOWING US PATENTS:
5736910 5939955 6425781 6428361 6554638 6840817 7123117
7429195 7717749 7808751 6217391 6149050 7924130

REVISIONS					
P	LTR	DESCRIPTION	DATE	DWN	APVD
	E	EC-1703035	22MAR2017	TRY	TY









1. MATERIALS
   - HOUSING: THERMOPLASTIC, FLAMMABILITY RATING UL 94V-0.
   - SHIELD: BRASS 0.20mm THICK, PREPLATED WITH 0.76um MIN SEMI-BRIGHT NICKEL. SOLDER TABS POST DIPPED WITH 2.54um MIN SAC SOLDER.
   - CONTACTS: PHOSPHOR BRONZE 0.46mm X 0.30mm, PHOSPHOR BRONZE, 1.27um MIN NICKEL UNDERPLATE, WITH 1.27um MIN GOLD PLATING AT MATING INTERFACE AND 2.54um MIN MATTE TIN ON SOLDER TAILS,
   - SOLDER TAILS: 0.25mmTHICK, PHOSPHOR BRONZE, 1.27um MIN OVERALL NICKEL UNDERPLATE, 3um TIN PLATE
   - 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, TIP TIN DIPPING

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

3 MAGNETICS
- -APPLICATION: 10/100 BASE-T, PoE
- -IMPEDANCE: 100 OHMS
- -TURNS RATIO (CHIP:CABLE): TX = 1:1, RX = 1:1
- -OPEN CIRCUIT INDUCTANCE (OCL): 350uH MIN @100kHz, 0.1VRMS, 8mADC BIAS FROM 0°C TO 70°C, TX AND RX
- -POE CURRENT: 350mADC MAX
- -PERFORMANCE @ 25°C:
  - INSERTION LOSS (IL): 1.1dB MAX FROM 0.5MHz TO 100MHz
  - RETURN LOSS (RL): 18dB MIN FROM 0.5MHz TO 30MHz
    18-20LOG(f/30)dB MIN FROM 30.1MHz TO 60MHz
    12dB MIN FROM 60.1MHz TO 80MHz
  - 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 FOR 60 SECONDS WITH A RISE TIME OF 500 V/SEC

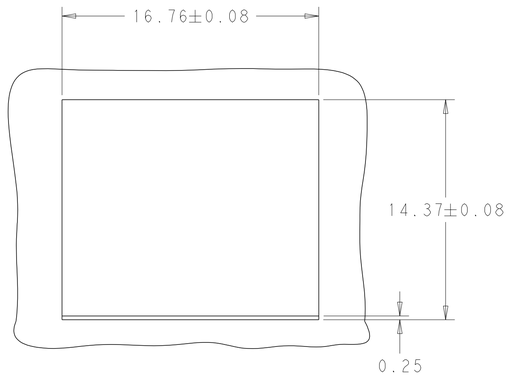
4. OPERATING TEMPERATURE: FROM 0°C TO +70°C.

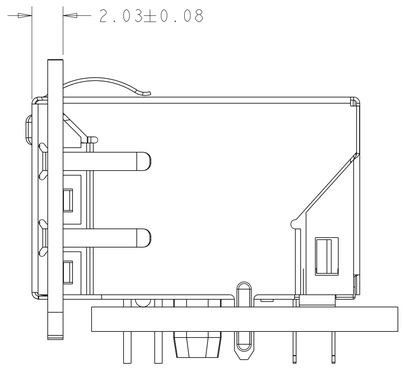
5 INDICATED MAGNETIC CONNECTIONS ARE SYMMETRICAL TO SUPPORT AUTO-MDI/MDIX.

6 THE 250 OHM LED RESISTORS ARE OPTIONAL, PLEASE SEE CHART FOR PRESENCE OR ABSENSE OF RESISTORS
IF LEDS WITHOUT 250 OHM RESISTORS, LEDS ARE DRIVEN WITH CONSTANT CURRENT AT APPROX 20mA
LED COLOR: DOMINATE WAVELENGTH (λD): GREEN 568 nm TYP @ IF=20mA
FORWARD VOLTAGE(VF): GREEN 2.2V TYP @ IF = 20mA
DOMINATE WAVELENGTH (λD): YELLOW 588 nm TYP @ IF=20mA
FORWARD VOLTAGE(VF): YELLOW 2.1V TYP @ IF = 20mA
IF LEDS WITH WITH BUILT-IN 250 OHM RESISTORS. LEDS ARE DRIVEN WITH 5V VOLTAGE AND THE MAX OPERATING CURRENT IS 20mA
LED COLOR: DOMINATE WAVELENGTH (λD): GREEN 568 nm TYP @ VF=5V
FORWARD CURRENT (IF): GREEN 12mA TYP @ VF = 5V
DOMINATE WAVELENGTH (λD): YELLOW 588 nm TYP @ VF=5V
FORWARD CURRENT (IF): YELLOW 13mA TYP @ VF = 5V

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

8. PART SHOULD BE RECOMMENDED FOR WAVE SOLDERING PROCESS,PREHEAT TEMPERATURE IS 120°C TO 160°C, 120 SECONDS TO 180 SECONDS, PEAK WAVE SOLDERING TEMPERATURE IS 260°C MAX,10 SECONDS MAX.





SUGGESTED PANEL CUTOUT

HOUSING MATERIAL	DIM B	DIM A	EMI FINGER	LED1		LED2		PART NUMBER
				11 → 12	250 OHMS RESISTOR	13 → 14	250 OHMS RESISTOR	
PBT	1.65	3.68	YES	GREEN	WITH	YELLOW	WITH	1-2250024-1
HTN	1.27	2.30	YES	GREEN	WITH	YELLOW	WITH	2250024-7
PBT	1.27	2.30	YES	GREEN	WITH	YELLOW	WITH	2250024-6
PBT	1.27	3.68	YES	GREEN	WTIHOUT	YELLOW	WTIHOUT	2250024-5
PBT	1.27	3.68	NO	GREEN	WITH	YELLOW	WITH	2250024-4
PBT	1.27	3.68	NO	GREEN	WITH	GREEN	WITH	2250024-3
PBT	1.27	3.68	YES	GREEN	WITH	GREEN	WITH	2250024-2
PBT	1.27	3.68	YES	GREEN	WITH	YELLOW	WITH	2250024-1

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: -

APPLICATION SPEC: -

DWN 28MAY2013 ROY LIU
CHK 28MAY2013 TOWER YU/ FRANK LIU
APVD 28MAY2013 TONY YUAN

trp CONNECTOR a bel group — DONGGUAN CHINA

MODEL NAME: MAGJACK SINGLE PoE

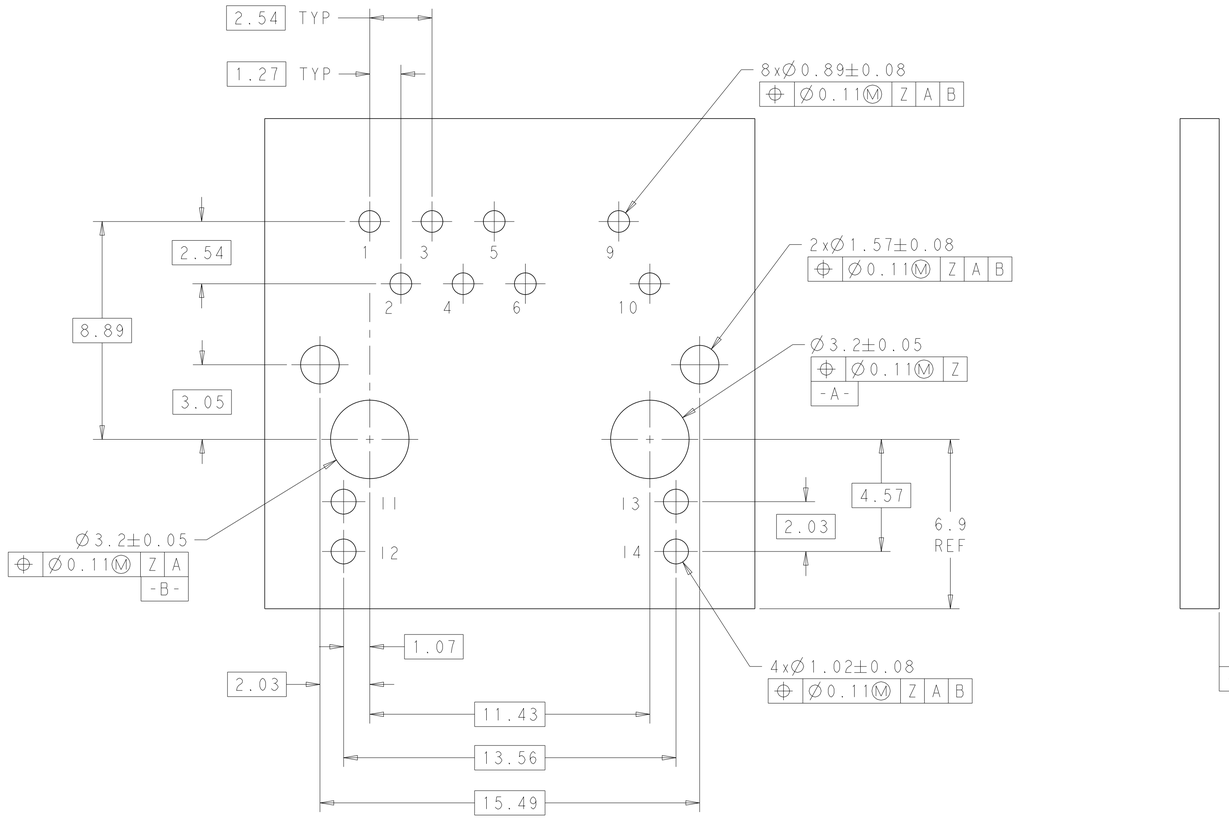
DESC: 1X1 7D144 10/100 POE TAB UP W/ LED -

SIZE A1 | CAGE CODE | DRAWING NO: C-2250024 | RESTRICTED TO -

CUSTOMER DRAWING | SCALE 4:1 | SHEET 1 OF 2 | REV E

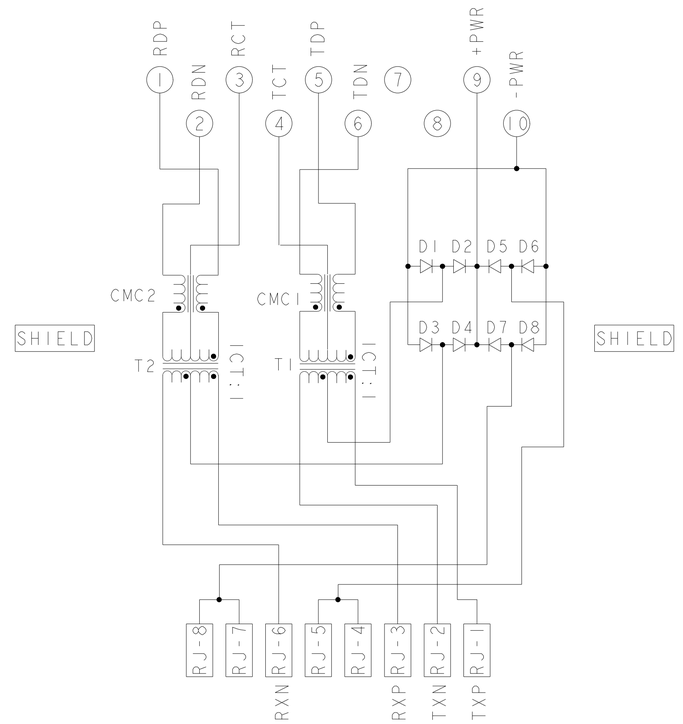
Please read our datasheet & drawing disclaimer here.

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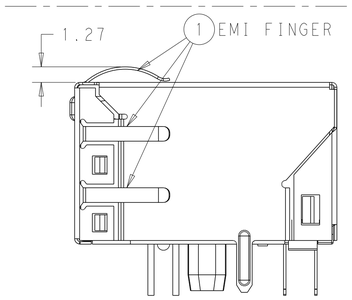


SUGGESTED PCB LAYOUT

7D144 PoE MAGNETIC CIRCUIT △3 △5

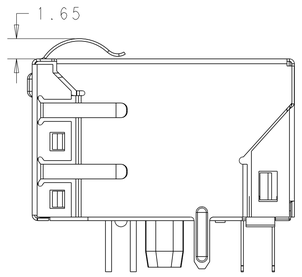


D1-D8 = RECTIFIER DIODE
-FORWARD VOLTAGE, Vf = 1.2V MAX @ If= 0.5A
-FORWARD CURRENT, If = 0.5A MAX
-REVERSE VOLTAGE, Vr = 80V MAX

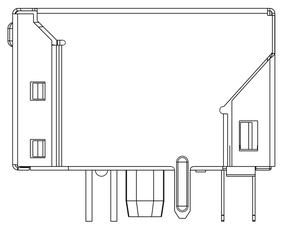


FOR 2250024-1
2250024-2
2250024-5

2250024-6&7
(SHORT PIN)



FOR 1-2250024-1



FOR 2250024-3
2250024-4

THIS DRAWING IS A CONTROLLED DOCUMENT. AND COMPLIANT TO ASME Y14.5M	DWN 28MAY2013 ROY LIU	trp CONNECTOR a bel group	DONGGUAN CHINA
DIMENSIONS: mm	CHK 28MAY2013 TOWER YU/ FRANK 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 28MAY2013 TONY YUAN	DESC 1X1 7D144 10/100 POE TAB UP W/ LED -	
PRODUCT SPEC -	APPLICATION SPEC -	MODEL NAME MAGJACK SINGLE PoE	SIZE A1 / CAGE CODE / DRAWING NO C-2250024 / RESTRICTED TO -
CUSTOMER DRAWING		SCALE 4:1 / SHEET 2 OF 2	REV E

xxxxx