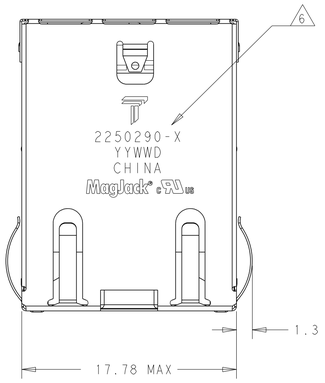
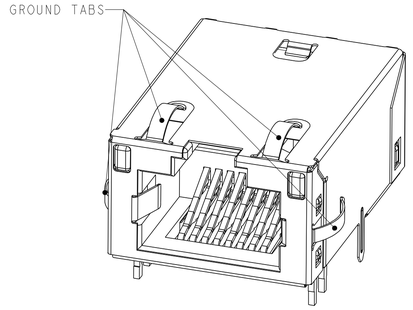
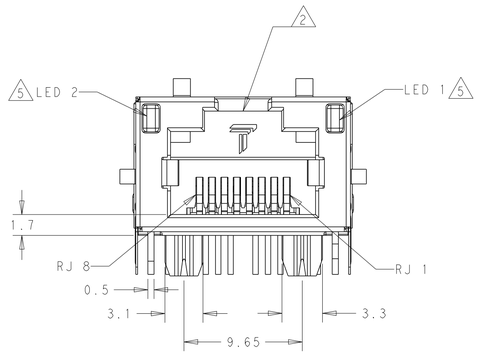
THIS DRAWING AND THE SUBJECT MATTER SHOWN THEREON ARE CONFIDENTIAL AND THE PROPERTY OF BEL/STEWART/TRP CONNECTOR AND SHALL NOT BE REPRODUCED, COPIED, OR USED IN ANY MANNER WITHOUT THE WRITTEN CONSENT OF TRP CONNECTOR.

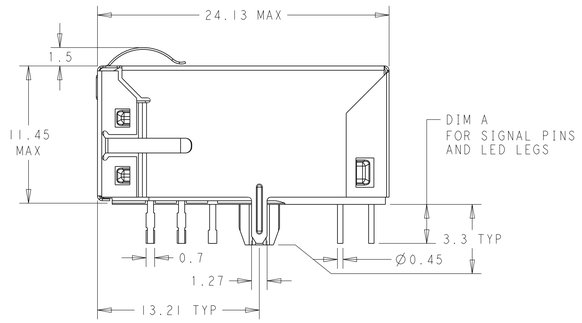
PRODUCT MAY BE PROTECTED BY ONE OR MORE OF THE FOLLOWING US PATENTS:
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7429195 7717749 7808751 6217391 6149050 7924130

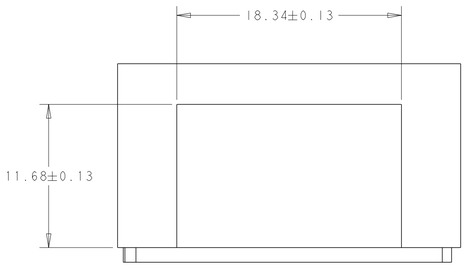
REVISIONS					
P	LTR	DESCRIPTION	DATE	DWN	APVD
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	E	EC-1907009	09JUL2019	TRY	TY

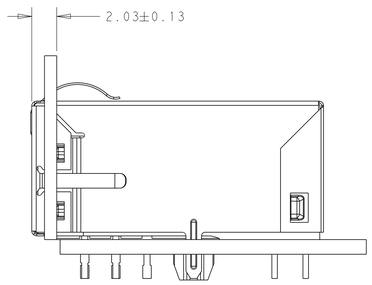












SUGGESTED PANEL CUTOUT

1. MATERIALS:
   - HOUSING: THERMOPLASTIC FLAMMABILITY, RATING, UL 94V-0
   - SHIELD: STAINLESS STEEL 0.15mm THICK, PREPLATED WITH 0.76 um MIN SEMI-BRIGHT NICKEL; SOLDER TABS POST PREPLATED WITH 3um TIN.
   - MOD JACK CONTACTS: 0.3mm THICK, PHOSPHOR BRONZE, 1.27 um MIN OVERALL NICKEL UNDERPLATE, WITH 0.76um MIN LOCALIZED GOLD PLATE AT PLUG INTERFACE; OR 1.27 um MIN OVERALL NICKEL UNDERPLATE, WITH 1.27um MIN LOCALIZED GOLD PLATE AT PLUG INTERFACE
   - 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.
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 OHMS
   - TURNS RATIO (CHIP:CABLE): 1:1 ALL FOUR PAIRS
   - OPEN CIRCUIT INDUCTANCE (OCL): 350uH MIN @100kHz, 0.1VRMS, 8mADC BIAS FROM 0°C TO 70°C, ALL FOUR PAIRS
   - ALL FOUR PAIRS BI-DIRECTINAL
   - 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:
     2250 VDC FOR 60 SECONDS WITH A RISE TIME OF 500V/SEC
4. OPERATING TEMPERATURE: FROM 0°C TO 70°C
5. LED IS WITH CONSTANT CURRENT AT APPROX 20mA.
   LED COLOR: DONINANT WAVELENGTH(λD), GREEN = 568±5nm TYP. at IF=20mA
   FORWARD VOLTAGE(VF), GREEN 2.2V TYP. at IF=20mA.
   DONINANT WAVELENGTH(λD), YELLOW = 588±5nm TYP. at IF=20mA
   FORWARD VOLTAGE(VF), YELLOW 2.1V TYP. at IF=20mA.
   DONINANT WAVELENGTH(λD), ORANGE = 605±5nm TYP. at IF=20mA
   FORWARD VOLTAGE(VF), ORANGE 2.1V TYP. at IF=20mA.
   DONINANT WAVELENGTH(λD), ULTRA LOW WAVELENGTH GREEN(ULWG) 525nm TYP. at IF=20mA
   FORWARD VOLTAGE(VF), ULTRA LOW WAVELENGTH GREEN(ULWG) 2.8V TYP. at IF=20mA.
6. TRP CONNECTOR LOGO, PART NUMBER, DATE CODE, COUNTRY OF ORIGIN AND AGENCY APPROVAL MARKING IN APPROXIMATE LOCATION SHOWN.
7. THESE PARTS ARE COMPLIANT TO WAVE SOLDERING PROCESS, PREHEAT TEMPERATURE IS 120°C TO 160°C, 120 SECONDS TO 180 SECONDS, PEAK SOLDERING TEMPERATURE IS 260°C MAX, 10 SECONDS MAX
8. THESE PARTS ARE COMPLIANT TO IR REFLOW SOLDERING PROCESS, PEAK SOLDERING TEMPERATURE 260°C MAX DURATION TIME 10 SECONDS MAX, OVER 230°C WITHIN 40~60 SECONDS.

GROUND TABS	DIM A	GOLD PLATING THICKNESS 1	PACKAGE METHOD	SOLDERING PROCESS	LED 2			LED 1			PART NO.
					16 ▷◁ 15	16 ▷◁ 17	17 ▷◁ 16	13 ▷◁ 18	13 ▷◁ 14	14 ▷◁ 13	
NO	3.18	0.76	TRAY	WAVE SOLDERING 7	YELLOW	GREEN	-	-	-	GREEN	2-2250290-1
NO	3.18	0.76	TRAY	WAVE SOLDERING 7	ORANGE	GREEN	-	-	-	YELLOW	1-2250290-4
NO	3.18	0.76	TRAY	WAVE SOLDERING 7	YELLOW	ULWG	-	-	-	ULWG	1-2250290-1
NO	2.35	0.76	REEL	IR REFLOW 8	YELLOW	GREEN	-	-	-	GREEN	2250290-8
TOP ONLY	3.18	0.76	REEL	WAVE SOLDERING 7	-	-	GREEN	ORANGE	GREEN	-	2250290-7
TOP AND SIDES	3.18	0.76	REEL	IR REFLOW 8	ORANGE	GREEN	-	-	-	GREEN	2250290-6
TOP AND SIDES	2.79	1.27	REEL	IR REFLOW 8	-	ORANGE	GREEN	-	ORANGE	GREEN	2250290-5
TOP AND SIDES	3.55	0.76	TRAY	WAVE SOLDERING 7	YELLOW	GREEN	-	-	-	GREEN	2250290-4
TOP AND SIDES	3.18	0.76	TRAY	WAVE SOLDERING 7	YELLOW	GREEN	-	-	-	GREEN	2250290-3
TOP AND SIDES	2.30	0.76	TARY	IR REFLOW 8	YELLOW	GREEN	-	-	-	GREEN	2250290-2
TOP AND SIDES	3.18	0.76	TRAY	IR REFLOW 8	YELLOW	GREEN	-	-	-	GREEN	2250290-1

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 ±.-
4 PLC ±.-
ANGLES ±.-

PRODUCT SPEC: 108-104004
APPLICATION SPEC: -

DWN: ROY LIU 09JUL2015
CHK: TOWER YU / BILL LIU 09JUL2015
APVD: TONY YUAN 09JUL2015

MODEL NAME: MAGJACK SINGLE Non-PoE

trp CONNECTOR a bel group — DONGGUAN CHINA

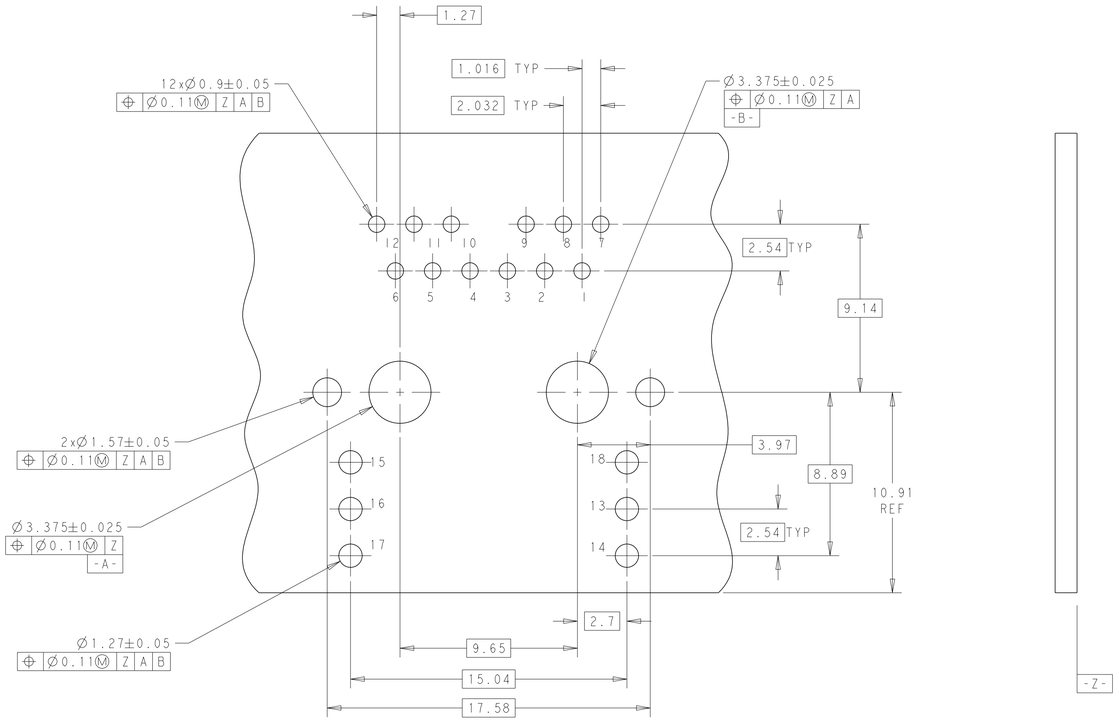
DESC: 1X1 1G18 GIGABIT TAB UP LOW PROFILE W/ LED

SIZE A1 | CAGE CODE | DRAWING NO: C-2250290 | RESTRICTED TO -

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

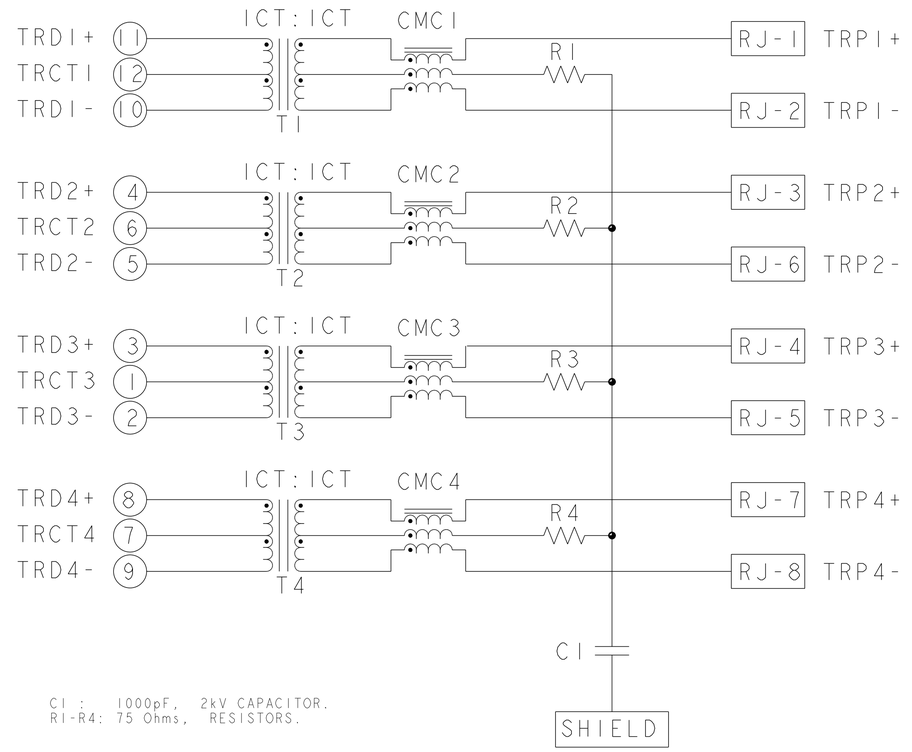
Please read our datasheet & drawing disclaimer here.

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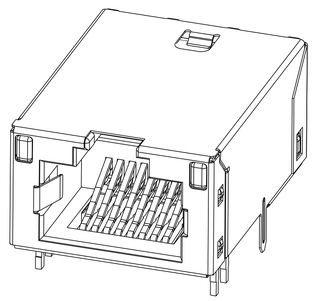


SUGGESTED PCB LAYOUT

IGI8 GIGABIT CIRCUIT △3

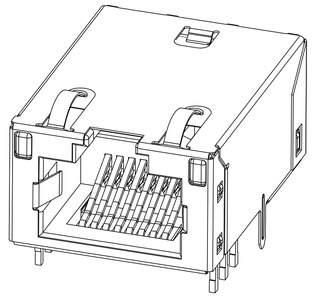


C1 : 1000pF, 2kV CAPACITOR.
R1-R4: 75 Ohms, RESISTORS.



2250290-8
1-2250290-1
1-2250290-4
2-2250290-1

NO GROUND TABS



2250290-7

TOP GROUND TABS ONLY

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 ±
4 PLC ±
ANGLES ±

PRODUCT SPEC: 108-104004
APPLICATION SPEC: -

DWN 09JUL2015 ROY LIU
CHK 09JUL2015 TOWER YU / BILL LIU
APVD 09JUL2015 TONY YUAN

trp CONNECTOR a bel group — DONGGUAN CHINA

MODEL NAME: MAGJACK SINGLE Non-PoE

DESC: IXI IGI8 GIGABIT TAB UP LOW PROFILE W/ LED

SIZE A1 | CAGE CODE | DRAWING NO: Ⓒ-2250290 | RESTRICTED TO: -

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

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