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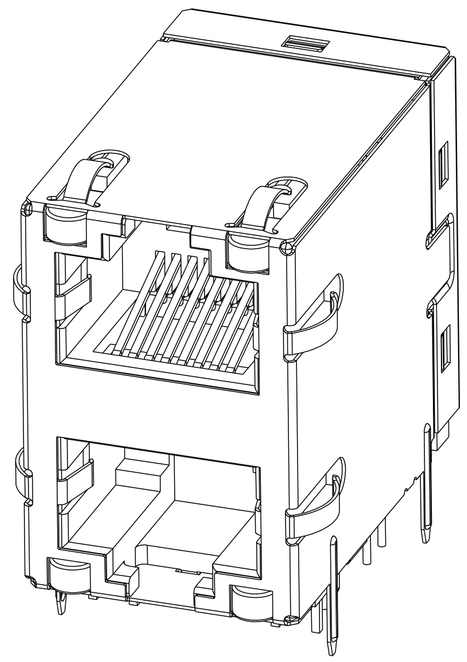
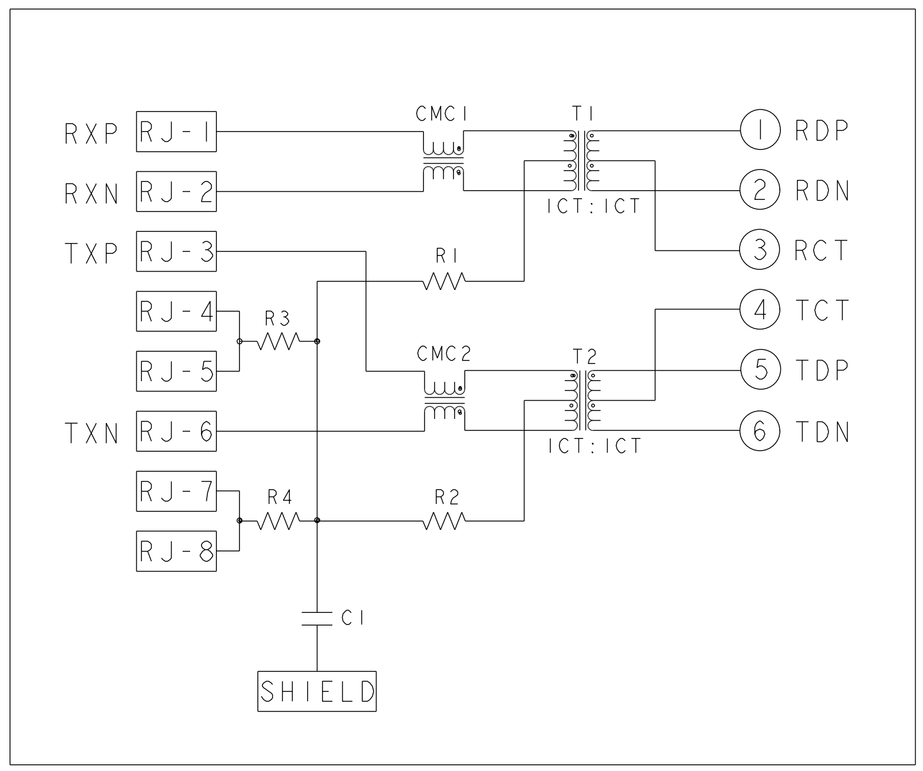
PRODUCT MAY BE PROTECTED BY ONE OR MORE OF THE FOLLOWING US PATENTS:
5736910 5939955 6425781 6428361 6554638 6840817 7123117
7429195 7717749 7808751 8217391 8149050 7924130

REVISIONS					
P	LTR	DESCRIPTION	DATE	DWN	APVD
	D	EC-1411035 COMPANY LOGO CHANGE	28DEC2014	GZ	TY



S866ETP9 10/100 BASE-T CIRCUIT 2 7

TOP AND BOTTOM PORTS



C1 = 1000pF, 2kV, X7R DECUPLING CAPACITOR
R1-R4 = 75 Ohms, 1/16 W, RESISTORS

1 MATERIALS:
PLASTIC HOUSING: BLACK, THERMOPLASTIC FLAMMABILITY RATING UL 94V-0
SHIELD: BRASS, PREPLATED WITH 0.76um MIN SEMI-BRIGHT NICKEL,
POST DIPPED WITH 2.54um MIN SAC SOLDER ON SOLDER TAILS,
CONTACTS: PHOSPHOR BRONZE, 1.27um MIN OVERALL NICKEL
UNDERPLATE WITH SELECT 1.27um MIN GOLD AT MATING INTERFACE
AND 2.54um MIN MATTE TIN ON SOLDER TAILS.
ALL PC BOARDS: HIGH TEMPERATURE PCB, TG>170°C

2 MAGNETICS
APPLICATION: 10/100 BASE-T
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 -40°C TO +85°C, TX AND RX
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 (MAX) FOR 60 SECONDS WITH A RISE TIME
OF 500V/SEC AND WITH ALL PORTS CONNECTED.

3 PART NUMBER, DATE CODE AND COUNTRY OF ORIGIN ARE LOCATED IN APPROXIMATE AREA SHOWN. DATE CODE: "YY" IS YEAR, "WW" IS WORK WEEK, "D" IS DAY OF WEEK, WITH SUNDAY=1

4 TRP CONNECTOR LOGO AND AGENCY APPROVAL LOGO ARE LOCATED IN APPROXIMATE AREA SHOWN.

5. OPERATING TEMP: FROM -40°C TO +85°C.

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

7 INDICATED MAGNETIC CONNECTIONS ARE SYMMETRICAL AND SUPPORT AUTO-MDI/MDIX.

8 DATUM AND BASIC DIMENSION ESTABLISHED BY CUSTOMER.

9 BASIC DIMENSION ESTABLISHED BY CUSTOMER, BUT MAY NOT BE GREATER THAN 5.08mm.

10 LEDS ARE DRIVEN WITH CONSTANT CURRENT AT APPROX 20mA
LED COLOR: DOMINANT WAVELENGTH (ID): GREEN 568 nm TYP. @ IF=20mA
FORWARD VOLTAGE (VF): GREEN 2.2V TYP. @ IF=20mA
DOMINANT WAVELENGTH (ID): YELLOW 588 nm TYP. @ IF=20mA
FORWARD VOLTAGE (VF): YELLOW 2.1V TYP. @ IF=20mA

11. THIS PART IS RECOMMENDED FOR WAVE SOLDERING PROCESS,
PEAK TEMPERATURE 260°C MAX, 10 SECONDS MAX.

GREEN/YELLOW	GREEN/YELLOW	GREEN/YELLOW	GREEN/YELLOW	1840642-4
GREEN	YELLOW	GREEN	YELLOW	1840642-3
BOTTOM LED 2	BOTTOM LED 1	TOP LED 2	TOP LED 1	PART NUMBER

THIS DRAWING IS A CONTROLLED DOCUMENT.

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 108-10004 2

APPLICATION SPEC -

DWN PAUL/SEAN 24MAY2011
CHK QUENTIN LIU 24MAY2011
APVD LIJUN RAO 24MAY2011

trp CONNECTOR a bel group — DONGGUAN CHINA

MODEL NAME: MAGJACK STACK Non-PoE

DESC: 2X1 S866ETP9 10/100 W/ LED

SIZE A1 | CAGE CODE | DRAWING NO C-1840642 | RESTRICTED TO -

CUSTOMER DRAWING | SCALE NTS | SHEET 1 OF 4 | REV D

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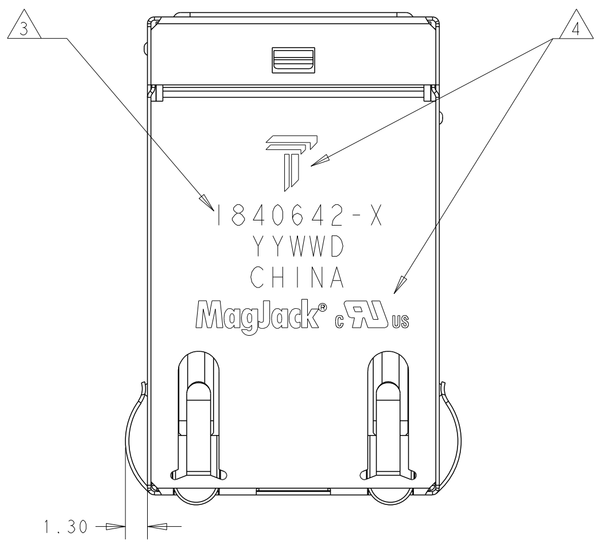

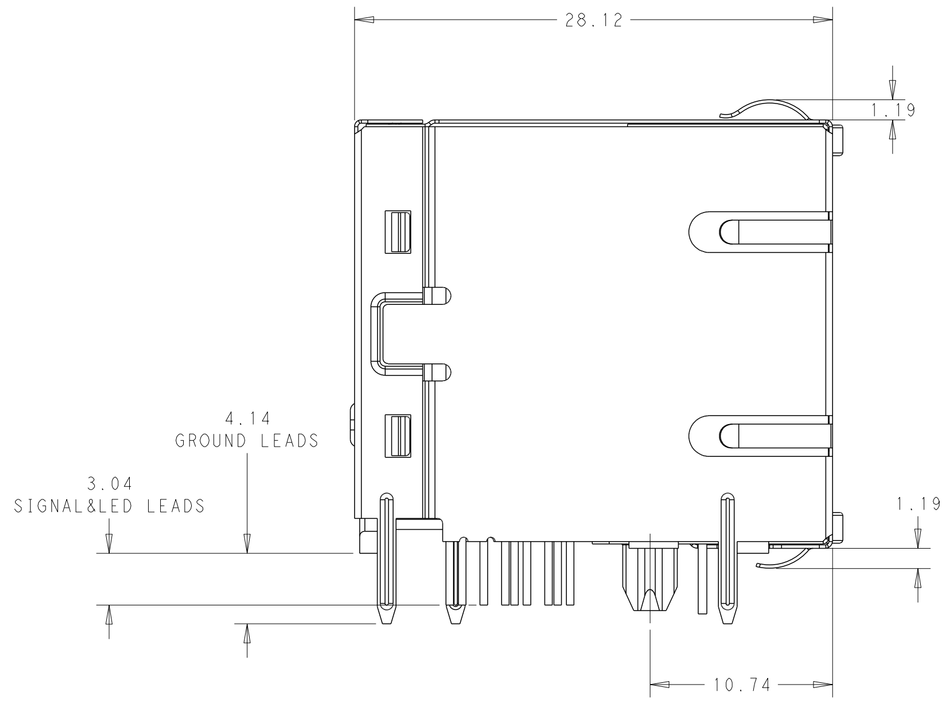

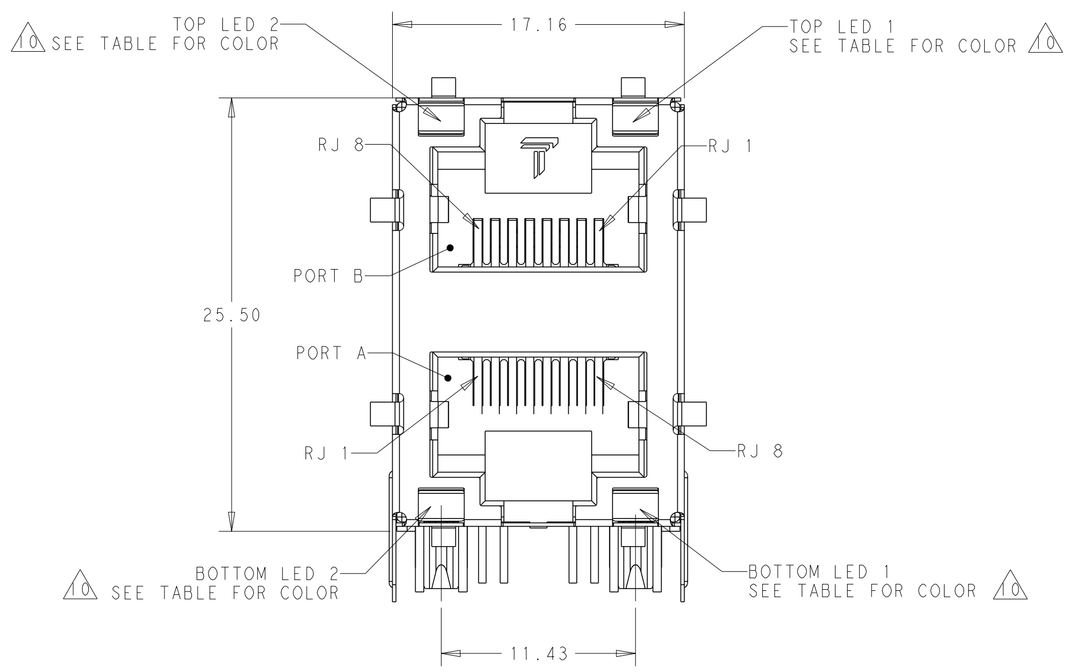

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1 PLC ±0.25
2 PLC ±0.25
3 PLC ±-
4 PLC ±-
ANGLES ±-

PRODUCT SPEC 108-104004

APPLICATION SPEC -

DWN PAUL/SEAN 24MAY2011
CHK QUENTIN LIU 24MAY2011
APVD LIJUN RAO 24MAY2011

trp CONNECTOR a bel group DONGGUAN CHINA

MODEL NAME MAGJACK STACK Non-PoE

DESC 2X1 S866ETP9 10/100 W/ LED

SIZE A1 | CAGE CODE | DRAWING NO C-1840642 | RESTRICTED TO -

CUSTOMER DRAWING | SCALE NTS | SHEET 2 OF 4 | REV D

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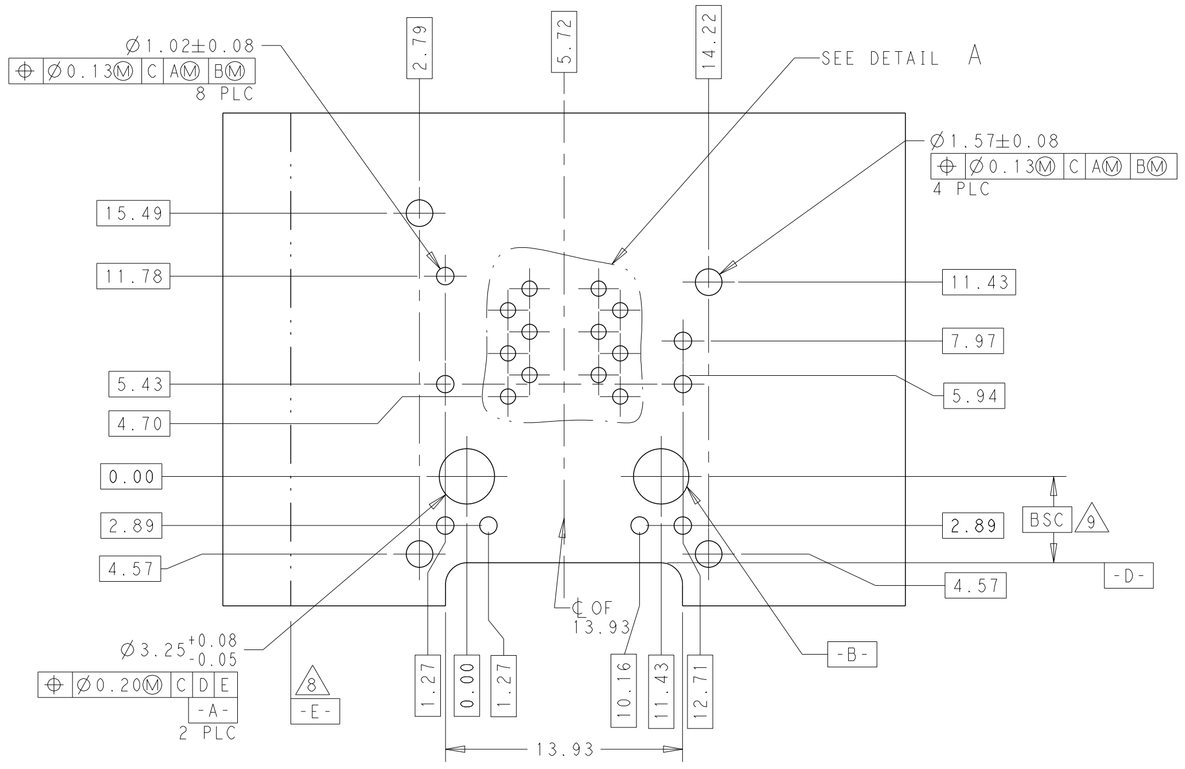
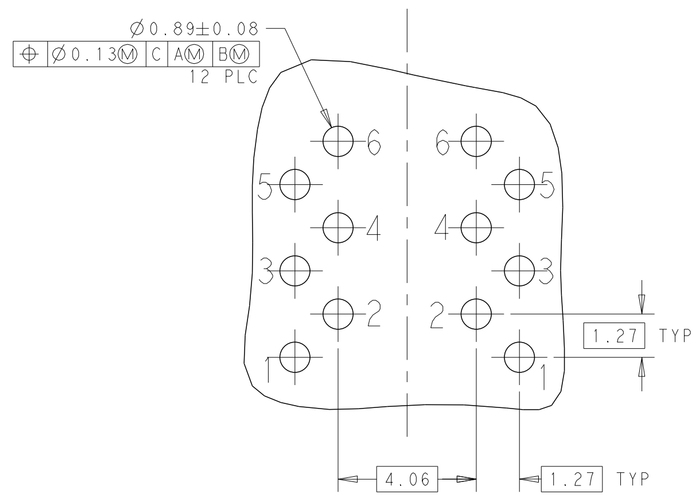
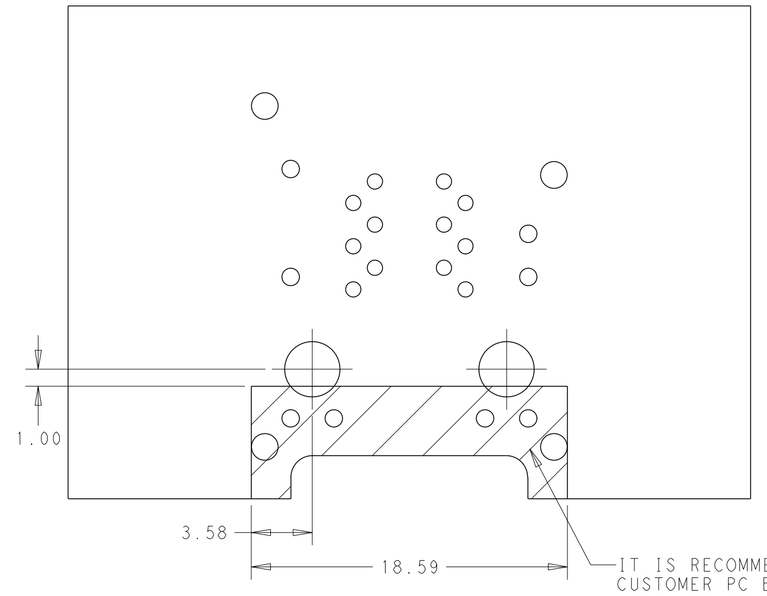


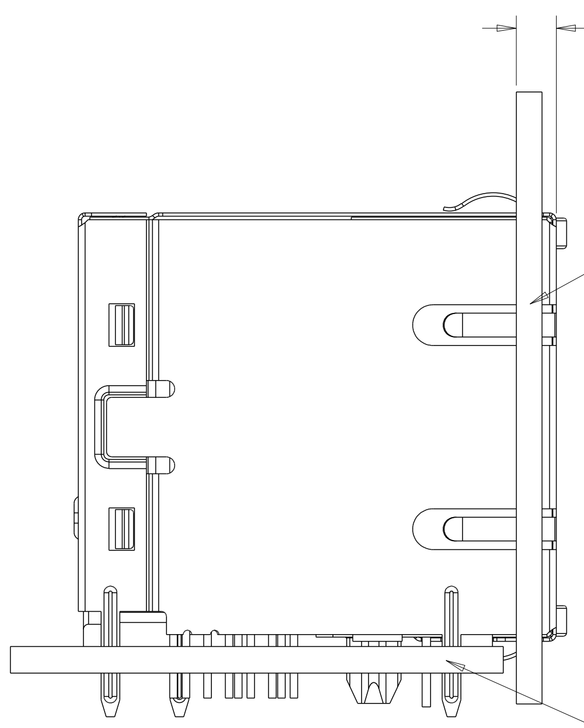
RECOMMENDED PCB LAYOUT
COMPONENT SIDE VIEW



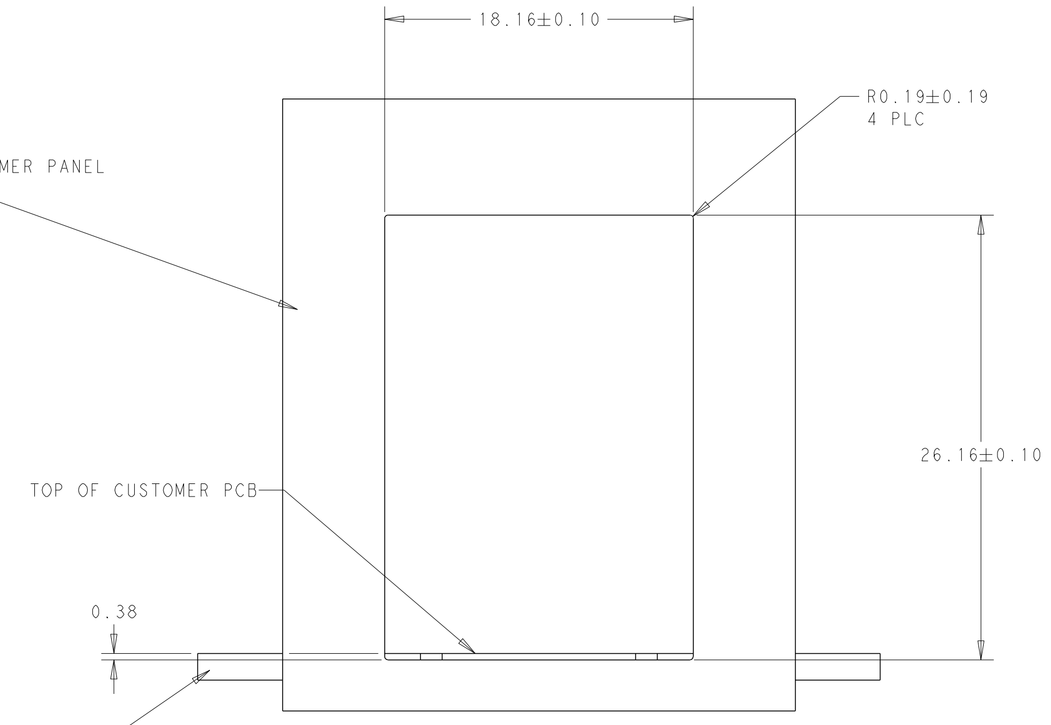
DETAIL A
SCALE 8:1



IT IS RECOMMENDED THAT SHADED AREA OF CUSTOMER PC BOARD BE CLEAR OF ANY VIA HOLE, COMPONENT AND CIRCUIT TRACE



SHOWN WITH PANEL AND
CUSTOMER PCB ASSEMBLY



SUGGESTED PANEL CUTOUT DIMENSIONS

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		CHK QUENTIN LIU 24MAY2011	
DIMENSIONS: mm	TOLERANCES UNLESS OTHERWISE SPECIFIED: 0 PLC ±0.25; 1 PLC ±0.25; 2 PLC ±0.25; 3 PLC ±-; 4 PLC ±-; ANGLES ±-	APVD LIJUN RAO 24MAY2011	DESC 2X1 S866ETP9 10/100 W/ LED
PRODUCT SPEC 108-104004	APPLICATION SPEC -	MODEL NAME MAGJACK STACK Non-PoE	SIZE A1 · CAGE CODE · DRAWING NO C-1840642 · RESTRICTED TO -
		CUSTOMER DRAWING	SCALE NTS · SHEET 3 OF 4 · REV D

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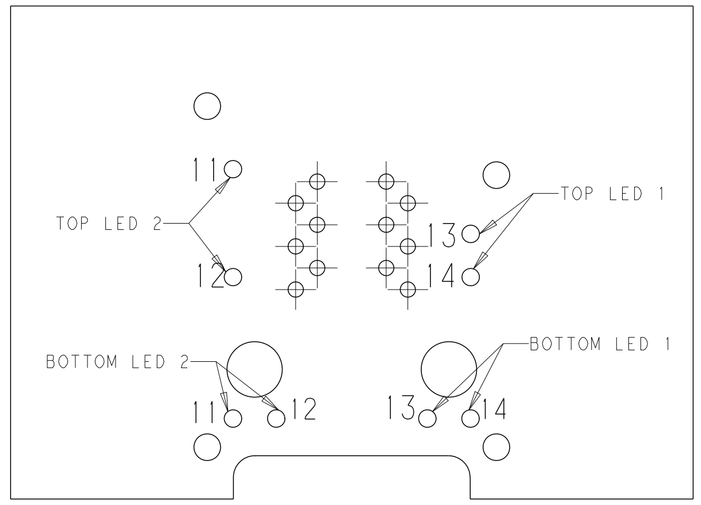
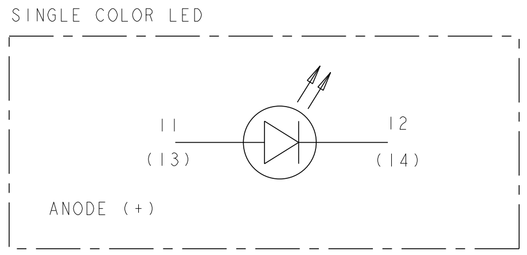
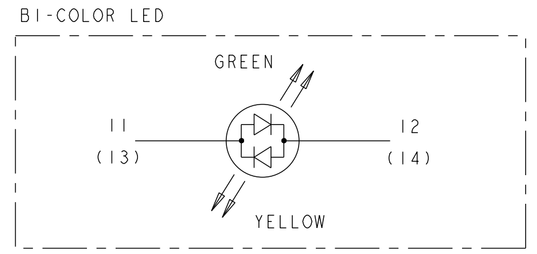


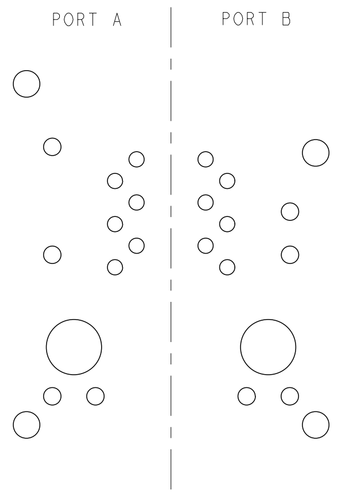
LED HOLE DESIGNATIONS
VIEWED FROM COMPONENT SIDE

SINGLE COLOR LED



BI-COLOR LED





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		CUSTOMER DRAWING	SCALE NTS · SHEET 4 OF 4 · REV D