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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 6217391 6149050 7924130

REVISIONS

P	LTR	DESCRIPTION	DATE	DWN	APVD
A		LOGO CHANGE	24APR2013	TY	KZ
B		EC-1411035 COMPANY LOGO CHANGE	09JAN2015	TYR	TYN

1840728-X  
YYWW  
CHINA  
MagJack® c RJ45

16.79

19.19±0.51

LED1

LED2

13.61

RJ8

RJ1

12.70 REF

33.02

15.01

3.68

7.75

3.18

15.24

17.78

20.32

DIM A TYP.

17.55

14.00

0.25

TOP OF PCB

2.03

SUGGESTED PANEL CUTOUT  
VS CUSTOMER BOARDCONNECTOR ASSEMBLED  
TO PANEL AND PCB

1. MATERIALS

HOUSING: THERMOPLASTIC, BLACK, FLAMMABILITY RATING UL 94V-0  
SHIELD: BRASS, 0.20mm THICK  
PREPLATED WITH MIN 0.76um SEMI-BRIGHT NICKEL  
POST DIPPED WITH 2.54um MIN SAC SOLDER AT GROUND PINS.  
CONTACT: PHOSPHOR BRONZE, 0.46mmX0.30mm  
WITH 1.27um MIN OVERALL NICKEL UNDERPLATE AND  
SELECTIVE 1.27um MIN GOLD PLATING AT MATING INTERFACE  
SOLDER TAIL: COPPER CLADDED STEEL, 0.50mm SQUARE  
PLATED WITH 2.54um MIN MATTE TIN  
LIGHT PIPE: POLYCARBON, TRANSPARENT, RATING UL 94V-0  
LED: DIFFUSED EPOXY LENS, 0.50mm SQUARE CARBON STEEL WIREFRAME LEADS  
PREPLATED WITH 2.03um MIN SILVER OVER 1.02um MIN NICKEL OVER 1.02um  
MIN COPPER UNDERPLATE POST PLATED WITH 2.54um MIN TIN,  
TIP TIN DIPPING

2. 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-DIRECTIONAL  
-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 DURATION FOR 1840728-6,  
1840728-7, 1-1840728-3, 1-1840728-5  
-ISOLATION VOLTAGE: 1500 VAC(RMS) AT 50 Hz TO 60 Hz FOR 60 SECONDS DURATION  
FOR 1840728-5, 1840728-9

3. THE MAGNETICS ARE SYMMETRICAL AND SUPPORT AUTO-MDIX OPERATION.

4. OPERATING TEMPERATURE: 0°C TO 70°C

5. LEDs ARE DRIVEN WITH CONSTANT CURRENT AT APPROX 20mA.

LED COLOR: DOMINANT WAVELENGTH (λ D): GREEN 568 nm TYP. at IF=20mA  
FORWARD VOLTAGE (VF): GREEN 2.2V TYP. at IF=20mA  
DOMINANT WAVELENGTH (λ D): YELLOW 588 nm TYP. at IF=20mA  
FORWARD VOLTAGE (VF): YELLOW 2.1V TYP. at IF=20mA  
DOMINANT WAVELENGTH (λ D): ORANGE 605 nm TYP. at IF=20mA  
FORWARD VOLTAGE (VF): ORANGE 2.1V TYP. at IF=20mA

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

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

8. THESE PARTS ARE 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.

3.56	YELLOW/GREEN	GREEN	1-1840728-5
3.18	GREEN/ORANGE	YELLOW	1-1840728-3
3.18	YELLOW	GREEN	1840728-9
3.18	GREEN	GREEN	1840728-7
3.18	YELLOW/GREEN	YELLOW/GREEN	1840728-6
3.18	YELLOW/GREEN	GREEN	1840728-5
DIM A	LED1	LED2	PART NUMBER

THIS DRAWING IS A CONTROLLED DOCUMENT.

DWN JALU XU 200CT2006

CHK KEITH ZHU 200CT2006

APVD TEDDY XIONG 200CT2006

MODEL NAME

MAGJACK

SINGLE NON-POE

SIZE A2

CAGE CODE C-1840728

DRAWING NO

SCALE 2:1

SHEET 1 OF 2

REV B

trp CONNECTOR  
a bel group

DONGGUAN CHINA

DESC IX1 IG4I GIGABIT  
TAB UP W/ LED

RESTRICTED TO -

CUSTOMER DRAWING

SCALE 2:1

SHEET 1 OF 2

REV B

DIMENSIONS:  
mm

PRODUCT SPEC  
108-2100TOLERANCES UNLESS  
OTHERWISE SPECIFIED:

0 PLC ±  
1 PLC ±0.25  
2 PLC ±0.25  
3 PLC ±0.25  
4 PLC ±

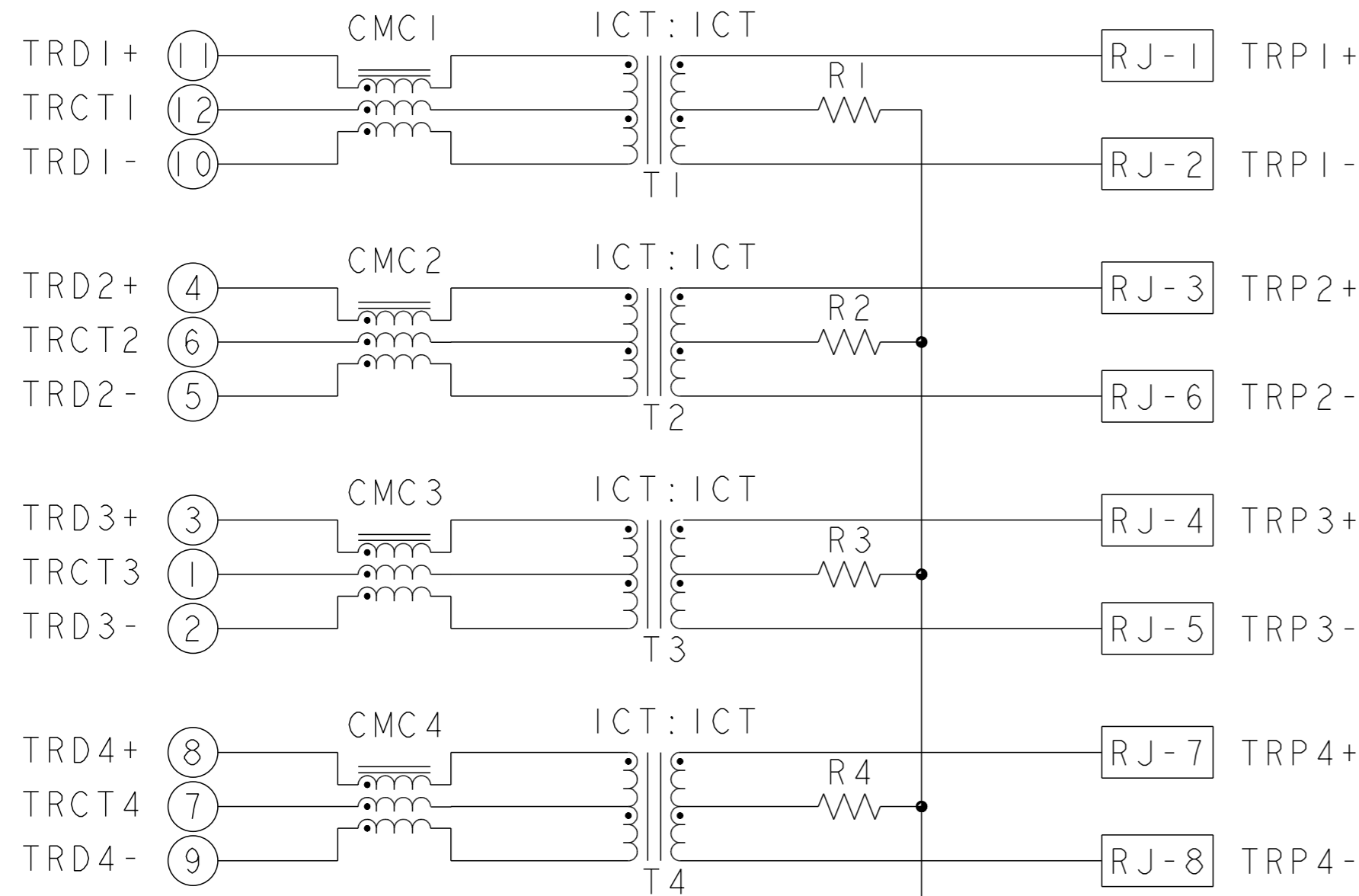
ANGLES ±

APPLICATION SPEC

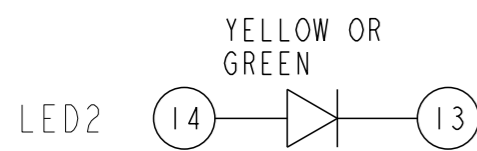
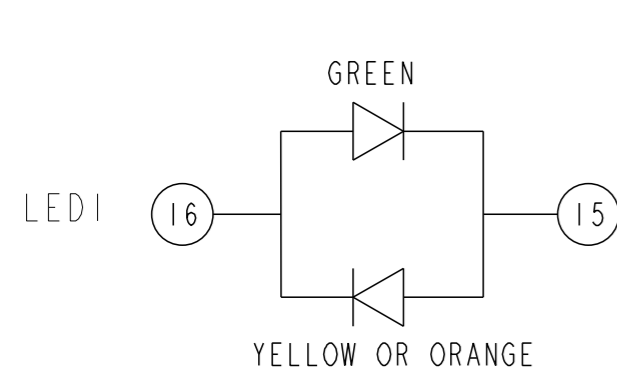
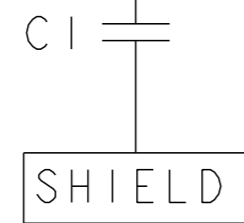
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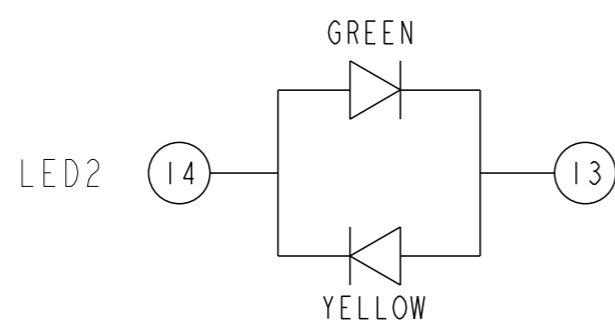
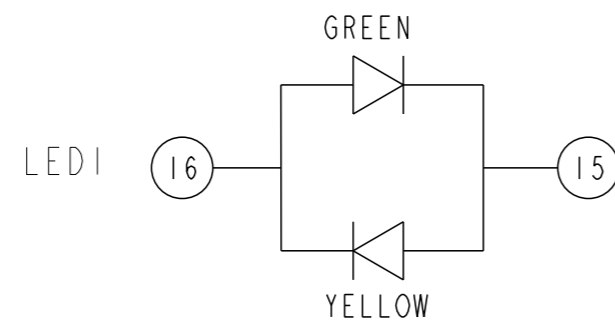
# IG41 GIGABIT CIRCUIT



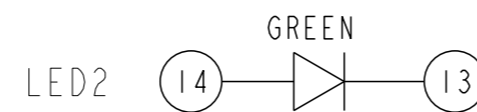
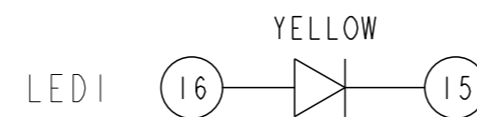
R1-R4=75 Ohms, 1/16W, 5% RESISTORS  
 C1=1000pF, 3kV CAPACITOR



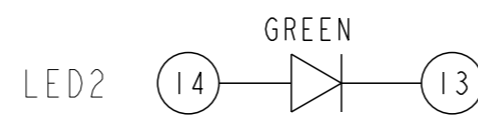
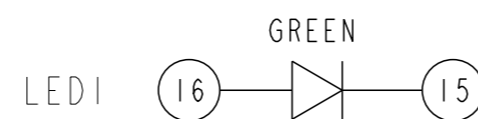
LED CONFIGURATION FOR 1-1840728-3, 1840728-5, 1-1840728-5



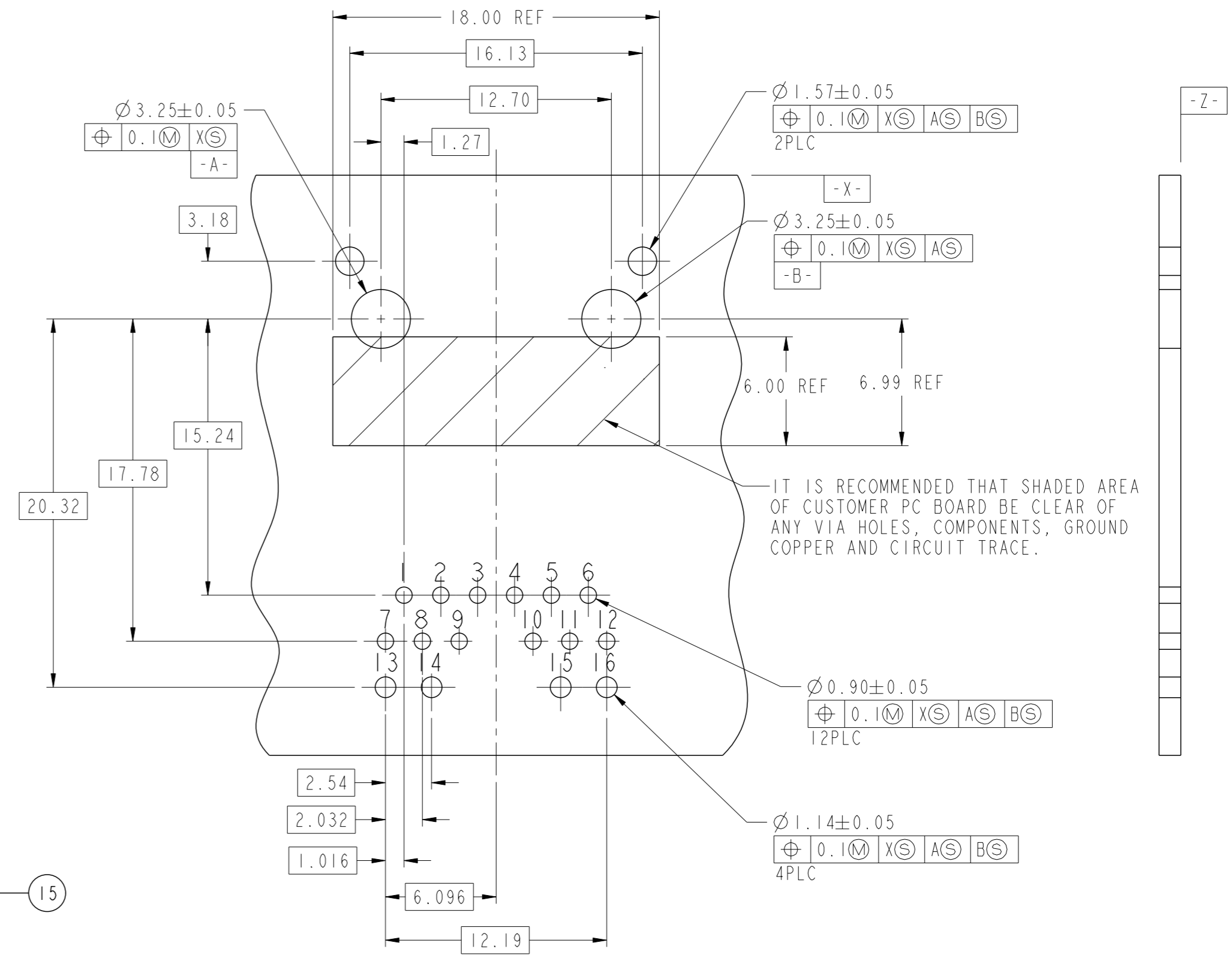
LED CONFIGURATION FOR 1840728-6 ONLY



LED CONFIGURATION FOR 1840728-9 ONLY



LED CONFIGURATION FOR 1840728-7 ONLY



IT IS RECOMMENDED THAT SHADED AREA OF CUSTOMER PCB BE CLEAR OF ANY VIA HOLES, COMPONENTS, GROUND COPPER AND CIRCUIT TRACE.

SUGGESTED CUSTOMER PCB COMPONENT SIDE SCALE 2:1

THIS DRAWING IS A CONTROLLED DOCUMENT.		DWN: JALU XU 200CT2006	<p><b>trp</b> CONNECTOR a bel group</p>	DONGGUAN CHINA		
DIMENSIONS: mm		CHK: KEITH ZHU 200CT2006		DESC: 1X1 IG41 GIGABIT TAB UP W/ LED		
TOLERANCES UNLESS OTHERWISE SPECIFIED:		APVD: TEDDY XIONG 200CT2006		SIZE: A2	CAGE CODE: C-1840728	RESTRICTED TO: -
0 PLC ± 1 PLC ±0.25 2 PLC ±0.25 3 PLC ±0.25 4 PLC ± ANGLES ± APPLICATION SPEC		MODEL NAME: MAGJACK SINGLE NON-POE		SCALE: 2:1 SHEET 2 OF 2 REV B		
PRODUCT SPEC: 108-2100		CUSTOMER DRAWING				