

4

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2

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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

REVISONS

P	LTR	DESCRIPTION	DATE	DWN	APVD
	J	EC-1411035 COMPANY LOGO CHANGE	09JAN2015	TRY	TY
	K	EC-1602013	16FEB2016	TRY	TY

1840437-X

YYWWD

CHINA

MagJack®

us

25.30

0.20

7

THE CONTACTS

8

RJ1

1.27

2 PLC

16.76

RJ8

1.70

11.30

6

LED 1

20.17

6

LED 2

0.35 REF

DIM A

SHIELD TABS

2 PLC

1.27

7.37 REF

DIM C POSTS

2 PLC

1.27

DIM B

LED PINS

5 PLC

3.90

2.60

1.27±0.08

13.00

8.14

15.95

22.92

0.50±0.08 TYP.

1.02

DIM D

SIGNAL PINS

10 PLC

1.90

0

-0.05

2 PLC

1.35

2 PLC

11

12

13

14

15

16

STANDOFF

PIN 10

0.50

10 PLC

PIN 1

BACK VIEW

OPTION 3

3.22

2.26

3.22

1.80

W/O ESD & R5

GREEN

GREEN/YELLOW

6-1840437-1

OPTION 2

3.22

3.68

3.22

3.22

W/O ESD & R5

GREEN/YELLOW

GREEN/YELLOW

5-1840437-1

OPTION 1

3.22

3.68

3.22

3.22

W/O ESD & R5

GREEN/ORANGE

YELLOW

4-1840437-1

OPTION 1

1.80

2.26

1.80

1.80

W/O ESD & WITH R5

GREEN/ORANGE

YELLOW

3-1840437-9

OPTION 1

1.80

2.26

1.80

1.80

W/O ESD & WITH R5

GREEN/ORANGE

YELLOW

3-1840437-1

OPTION 1

1.80

2.26

1.80

1.80

W/O ESD & R5

GREEN/ORANGE

YELLOW

2-1840437-1

OPTION 1

1.80

2.26

1.80

1.80

WITH ESD ONLY

GREEN/ORANGE

YELLOW

1-1840437-1

OPTION 1

1.80

2.26

1.80

1.80

WITH ESD & R5

GREEN/ORANGE

YELLOW

1840437-1

LED OPTION

DIM D

DIM C

DIM B

DIM A

ESD (4 PLC) & R5 OPTION

LED1

LED2

PART NUMBER

THIS DRAWING IS A CONTROLLED DOCUMENT.
AND COMPLIANT TO ASME Y14.5M

DIMENSIONS:
mm

PRODUCT SPEC

108-2207

TOLERANCES UNLESS OTHERWISE SPECIFIED:

0 PLC ±

1 PLC ±0.25

2 PLC ±0.25

3 PLC ±0.25

4 PLC ±

ANGLES ±

APPLICATION SPEC

-

DWN
TOMMY REN
10AUG2007

CHK
KEITH ZHU
10AUG2007

APVD
TEDDY XIONG
10AUG2007

MODEL NAME
MAGJACK
SINGLE NON-POE

DESC
IX1 4G62 GIGABIT
TAB DOWN LOW PROFILE OFFSET W/ LED

SIZE
A2

CAGE CODE

DRAWING NO
C-1840437

RESTRICTED TO
-

CUSTOMER DRAWING

SCALE
4:1

SHEET
1

OF
2

REV
K

trpCONNECTOR

a bel group

DONGGUAN
CHINA

I. MATERIALS
HOUSING: HIGH TEMPERATURE NYLON (FR52G30BL),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, 0.25mm THICK
WITH 1.27um MIN OVERALL NICKEL UNDERPLATE AND
SELECTIVE 1.27um MIN GOLD PLATING AT MATING INTERFACE
SOLDER TAIL:0.25mm THICK,PHOSPHOR BRONZE,1.27um MIN OVERALL NICKEL UNDERPLATE,
3 um MIN MATTE TIN PLATE.
LED: DIFFUSED EPOXY LENS, 0.50mm SQUARE CARBON STEEL WIREFRAME LEADS
PREPLATED WITH 2.03um MIN SILVER OVER 1.02um MIN NICKEL UNDERPLATE
OVER 1.02um MIN COPPER UNDERPLATE;POST PLATED WITH 2.54um MIN MATTE TIN.

2

RJ45 CAVITY CONFORMS TO FCC RULES AND REGULATION PART 68 SUBPART 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-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:COMPLY WITH IEEE802.3 2002, PARA 40.6.1.1, ITEM b.

4

OPERATING TEMPERATURE: 0°C ~ 70°C.

5

THE MAGNETIC CIRCUIT ARE SYMMETRICAL AND SUPPORT AUTO-MDIX OPERATION.

6

LEDS ARE DRIVEN WITH CONSTANT CURRENT AT APPROX 20mA.
LED COLOR: DOMINANT WAVELENGTH (λD): GREEN 568 nm TYP. at IF=20mA
FORWARD VOLTAGE (VF): GREEN 2.2V TYP. at IF=20mA
DOMINANT WAVELENGTH (λD): YELLOW 588 nm TYP. at IF=20mA
FORWARD VOLTAGE (VF): YELLOW 2.1V TYP. at IF=20mA
DOMINANT WAVELENGTH (λD): ORANGE 610 nm TYP. at IF=20mA
FORWARD VOLTAGE (VF): ORANGE 2.1V TYP. at IF=20mA

7

TRP CONNECTOR LOGO, PART NUMBER, DATE CODE, COUNTRY OF ORIGIN, AGENCY LOGO TO BE MARKED IN APPROXIMATE LOCATION SHOWN, DATE CODE: "YY" IS YEAR, "WW" IS WORK WEEK, "D" IS DAY OF WEEK, WITH SUNDAY=1.THIS PRINT PART NUMBER IS ONLY FOR REFERENCE, PLEASE REFER TO BELOW TABLE FOR ACTUAL ONE.

8

THIS CONNECTOR CAN PREVENTS THE INSERTION OF RJ11 (6 POSITION) PLUG INTO THE JACK, IF THE INSERTION FORCE MORE THAN 3.2kgf THAT MAY OVERCOME THE SELECTIVE FEATURES AND DAMAGE THE CONNECTOR.

9

ESD (4 PLC) & R5 ARE OPTIONAL, PLEASE SEE TABLE FOR PRESENCE OR ABSENCE IN EACH PART NUMBER.

10

ISOLATION VOLTAGE TEST IS APPLIED TO 1-1840437-1, 2-1840437-1, 4-1840437-1, 5-1840437-1 AND 6-1840437-1.

11. THESE PARTS ARE COMPLIANT TO BOTH WAVE SOLDERING PROCESS, PREHEAT TEMPERATURE IS ABOVE 150°C,120 SECONDS TO 180 SECONDS, PEAK SOLDERING TEMPERATURE IS 265°C MAX, 10 SECONDS MAX; AND IR REFLOW SOLDERING PROCESS, PEAK SOLDERING TEMPERATURE 260°C MAX DURATION TIME 10 SECONDS MAX, OVER 230°C WITHIN 40-60 SECONDS.

Additional Resources:

Product Page

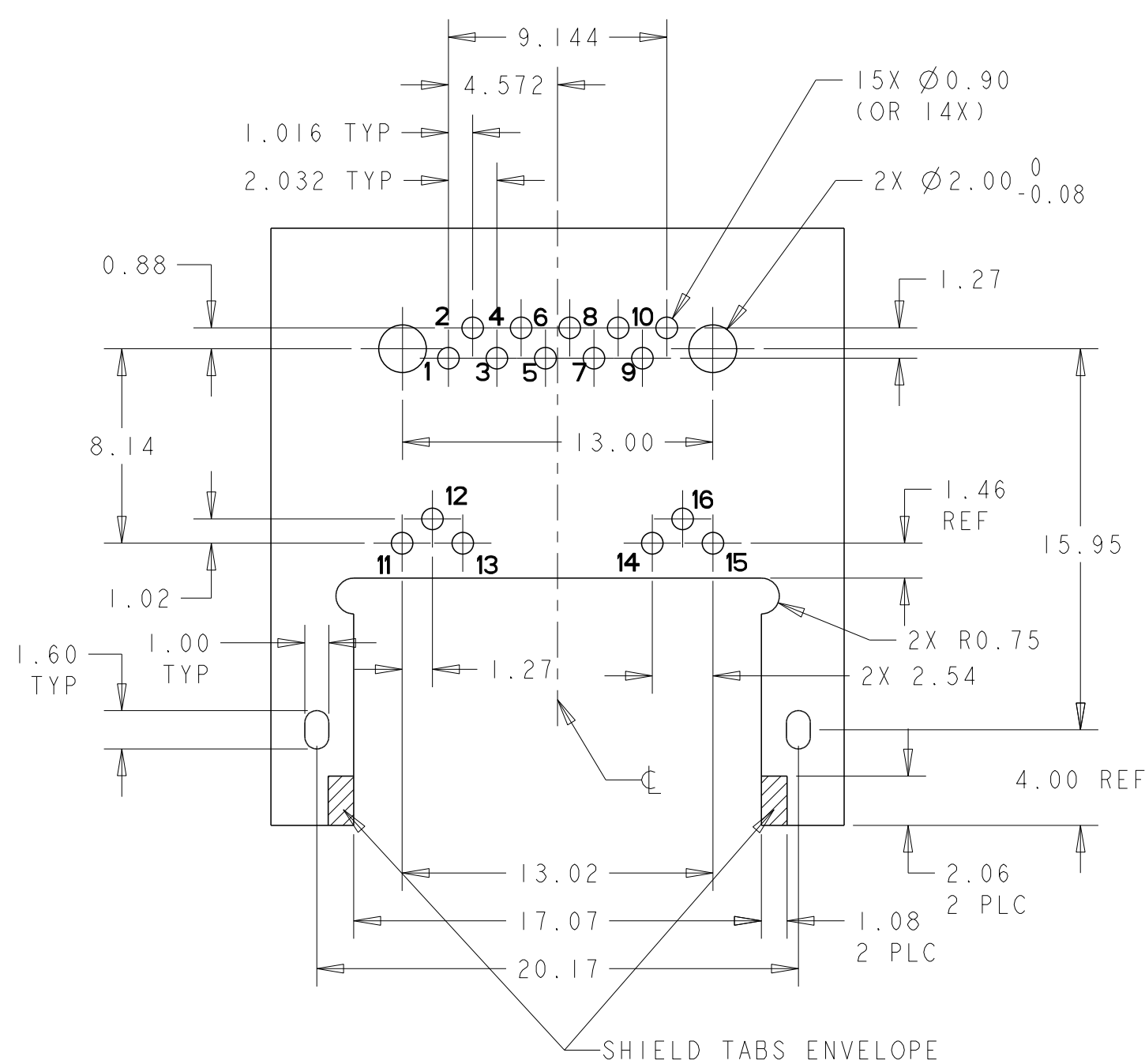
3D Model

PCB Footprint

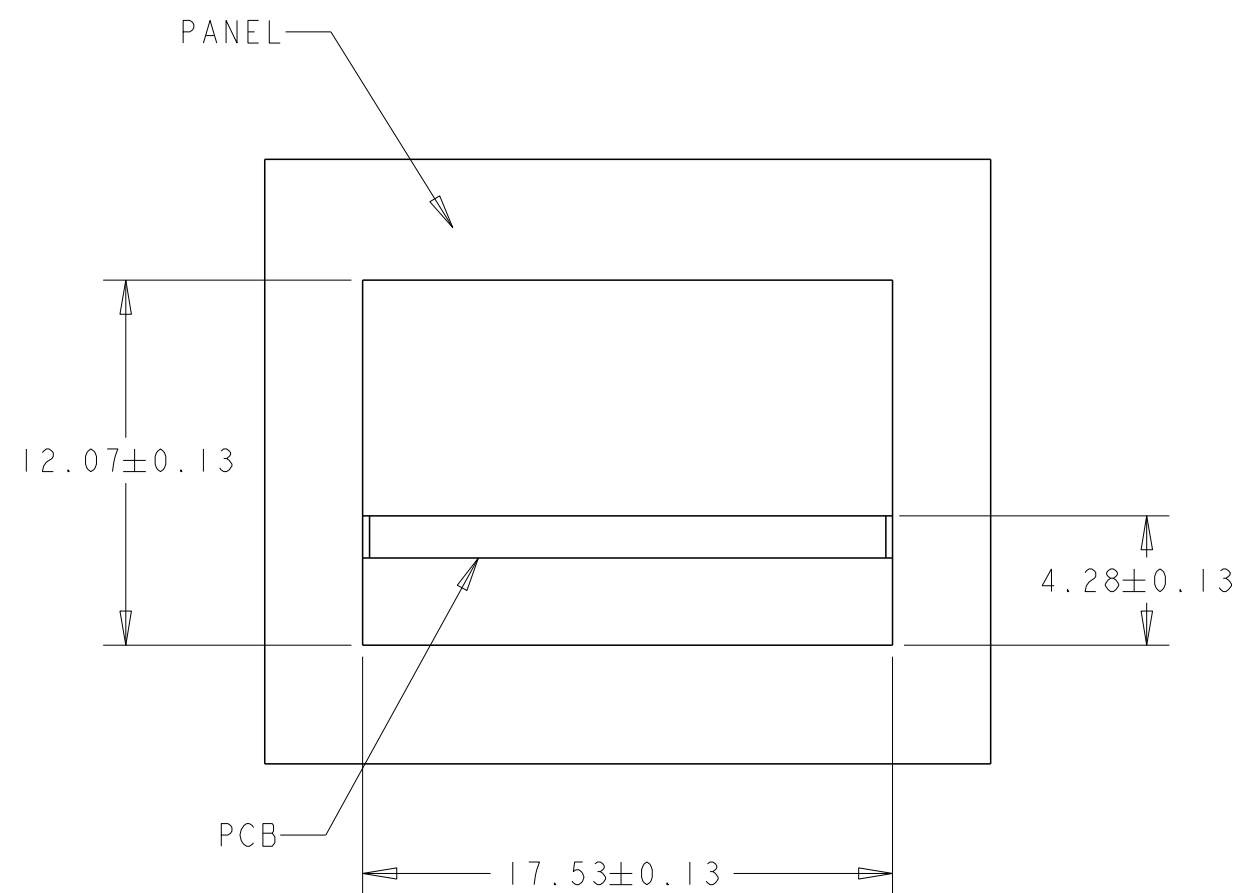
Technical Documentation

XXXXX

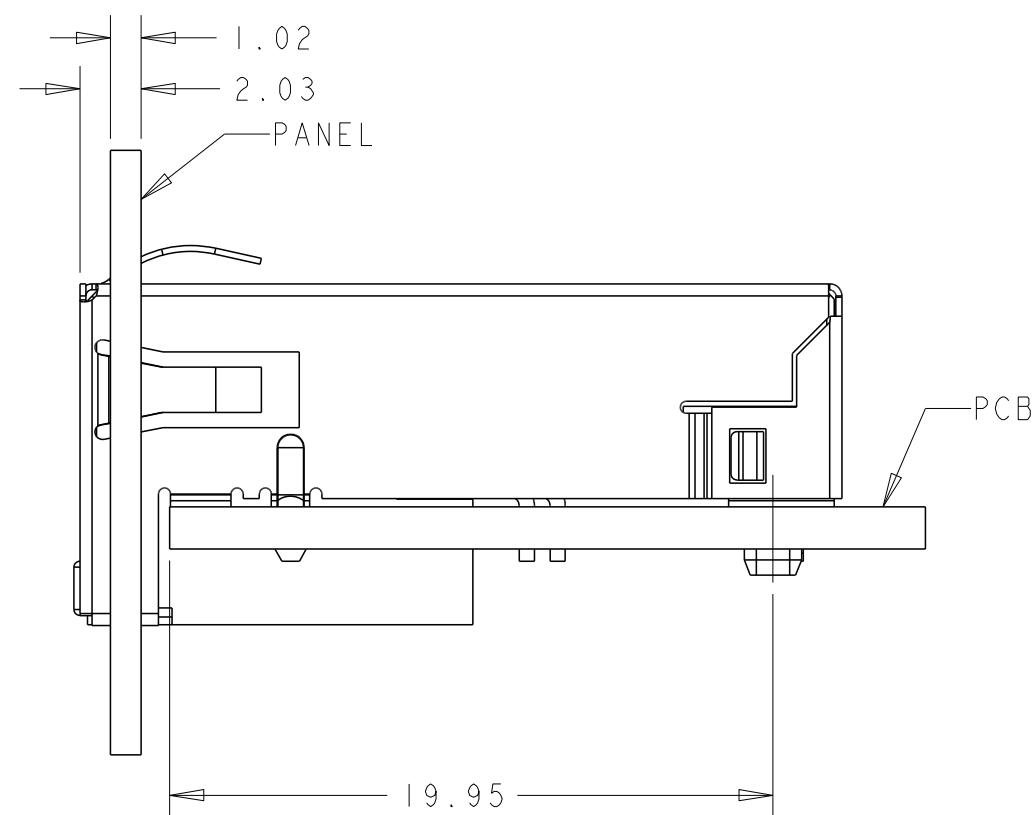
Downloaded from Arrow.com



SUGGESTED PCB LAYOUT (TOL:±0.05)
COMPONENT SIDE VIEW

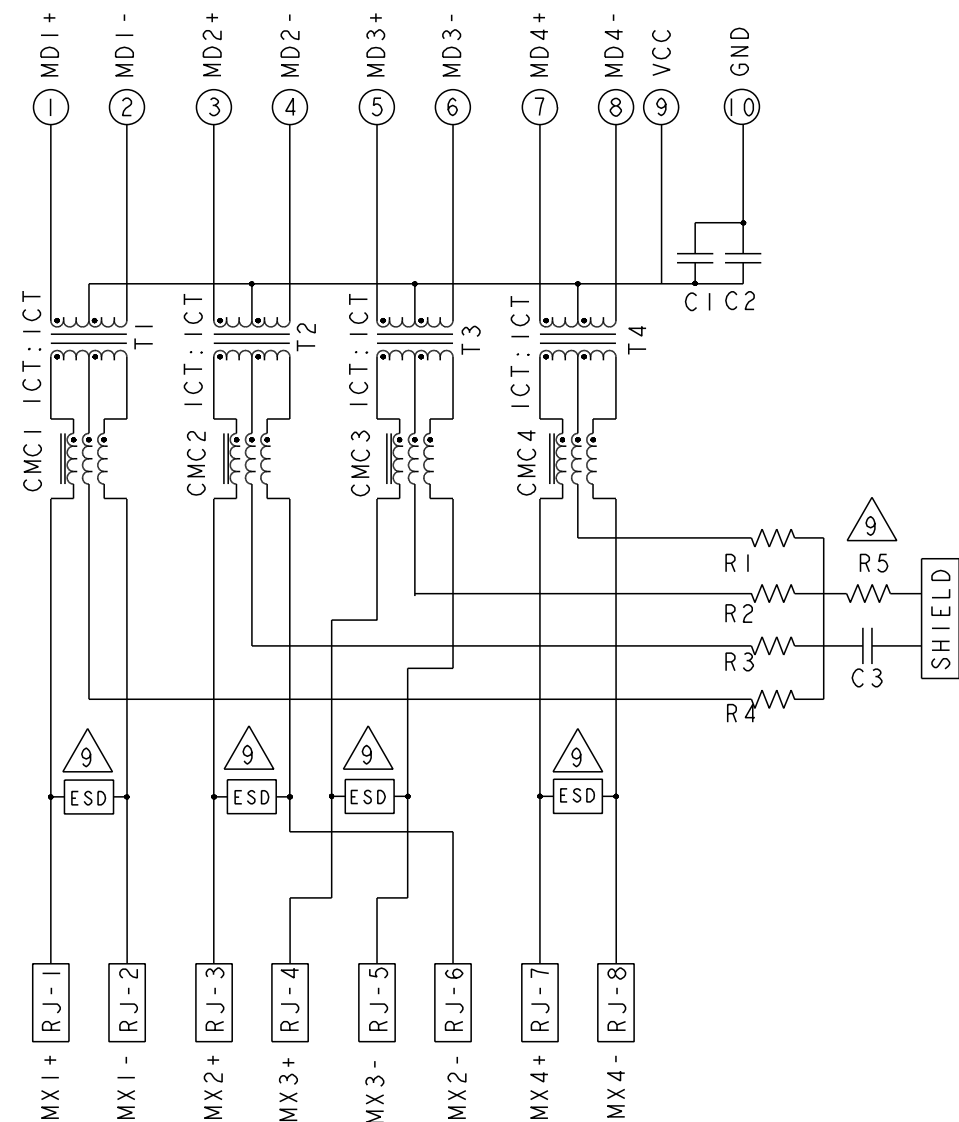


SUGGESTED PANEL CUTOUT



CONNECTOR ASSEMBLED
TO PANEL AND PCB

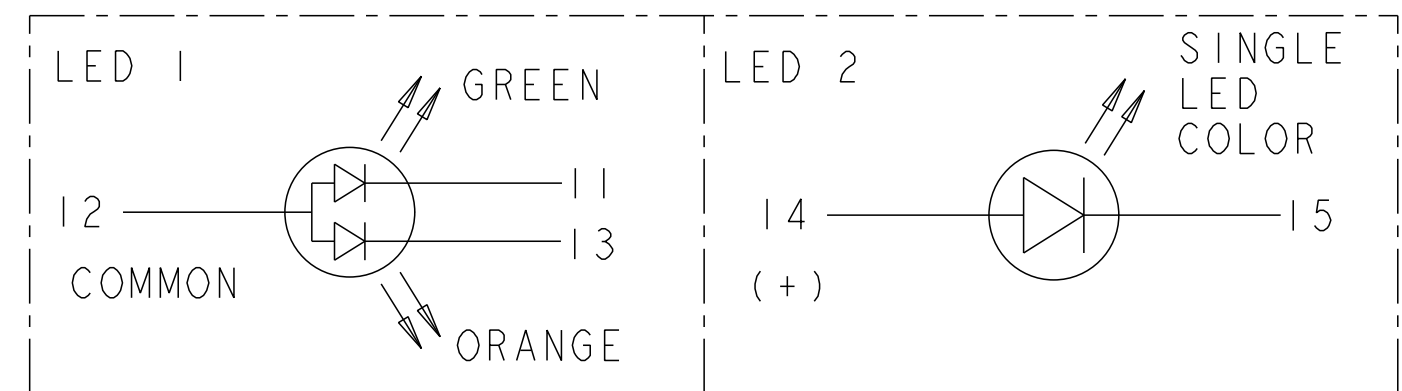
4G62 GIGABIT CIRCUIT



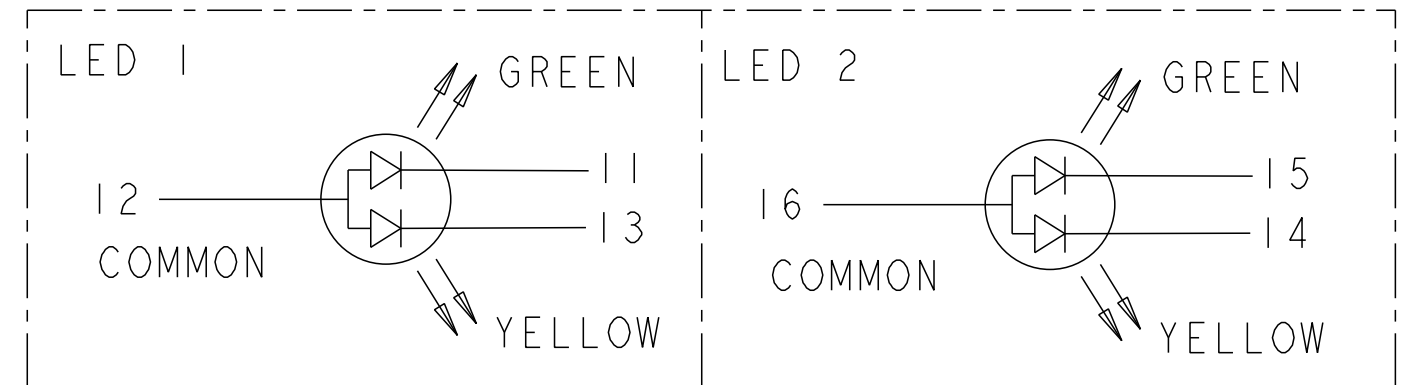
C1-C2 = 0.1uF 50V, CAPACITOR
C3 = 1000pF 2KV, CAPACITOR
R1-R4 = 75 ohms, 1/16W, RESISTOR
R5 = 1M ohms, 1/10W, RESISTOR
R5 = 22M ohms, 1/16W, RESISTOR, ONLY
FOR 3-1840437-1, 3-1840437-9

LED OPTION

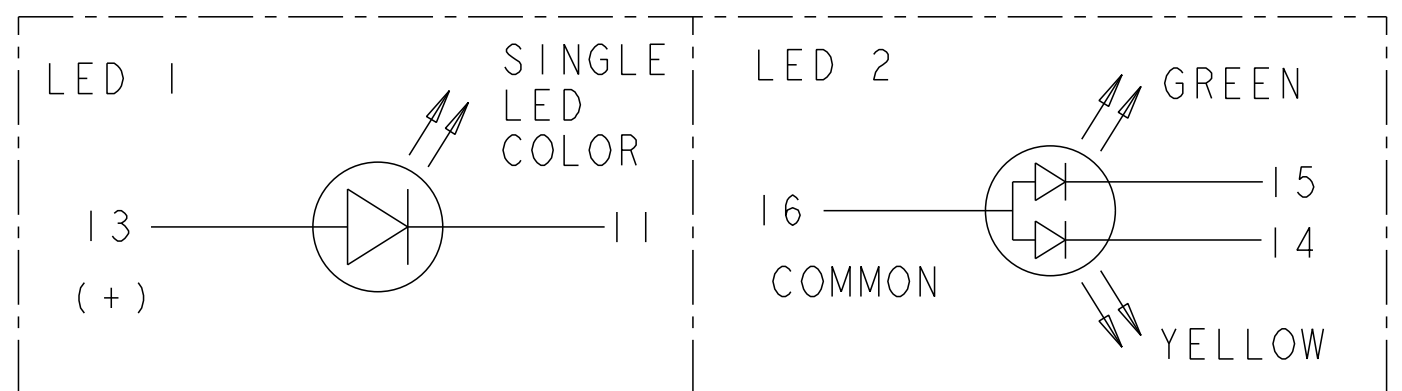
OPTION 1

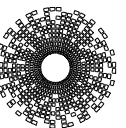
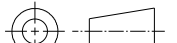


OPTION 2



OPTION 3



THIS DRAWING IS A CONTROLLED DOCUMENT. AND COMPLIANT TO ASME Y14.5M		DWN TOMMY REN 10AUG2007		 trp CONNECTOR a bel group		DONGGUAN CHINA	
DIMENSIONS: mm		CHK KEITH ZHU 10AUG2007					
TOLERANCES UNLESS OTHERWISE SPECIFIED:		APVD TEDDY XIONG 10AUG2007					
		MODEL NAME MAGJACK SINGLE NON-POE		DESC 1X1 4G62 GIGABIT TAB DOWN LOW PROFILE OFFSET W/ LED			
PRODUCT SPEC 108-2207		APPLICATION SPEC -		SIZE A2	CAGE CODE C-1840437	DRAWING NO -	RESTRICTED TO K
CUSTOMER DRAWING				SCALE 4:1	SHEET 2	OF 2	REV K