

THE INFORMATION CONTAINED HEREIN IS CONSIDERED "PROPRIETARY" TO BEL FUSE INC. AND SHALL NOT BE COPIED, REPRODUCED OR DISCLOSED WITHOUT THE WRITTEN APPROVAL OF BEL FUSE INC.

LED 2 & 4 POLARITY			LED 1 & 3 POLARITY		
PIN 13	PIN 14	COLOR	PIN 15	PIN 16	COLOR
+	-	YELLOW	+	-	GREEN
-	+	YELLOW	-	+	ORANGE

RoHS



**ELECTRICAL CHARACTERISTICS @ 25°C**

**URNS RATIO**

TP1	1CT : 1CT
TP2	1CT : 1CT
TP3	1CT : 1CT
TP4	1CT : 1CT

**INS. LOSS (MAX)**

1MHz TO 20MHz	-0.8 dB
50MHz	-1.0 dB
200MHz	-1.2 dB
400MHz	-2.0 dB
500MHz	-3.0 dB

**RET. LOSS (MIN) \_FORM TESTING**

1MHz	-20 dB
2MHz	-20 dB
100MHz	-20 dB
200MHz	-17 dB
300MHz	-13 dB
400MHz	-10 dB
500MHz	-6 dB

**CM TO DM REJ**

1MHz - 500MHz -30 dB MIN

HIPOT (Isolation Voltage): 2250VDC

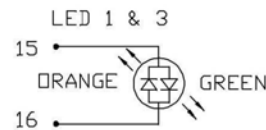
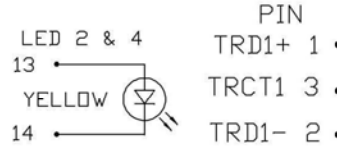
100% OF PRODUCTION TESTED TO COMPLY WITH IEEE 802.3 ISOLATION REQUIREMENTS.

**LED 1 & 3**

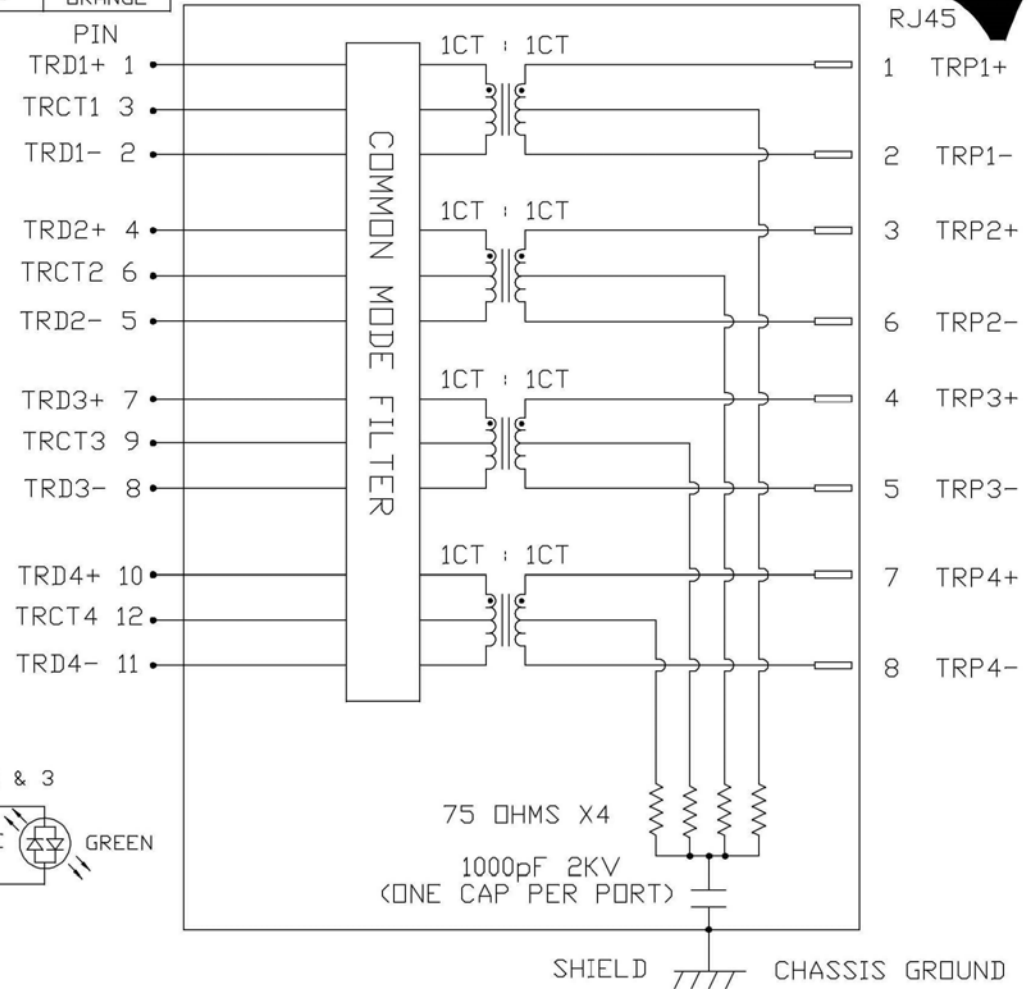
VF (FORWARD VOLTAGE) IF=20mA GREEN 2.2V TYP.  
ORANGE 2.0V TYP.  
λD (DOMINANT WAVELENGTH) IF=20mA GREEN 570nm TYP.  
ORANGE 605nm TYP.

**LED 2 & 4**

VF (FORWARD VOLTAGE) IF=20mA YELLOW 2.1V TYP.  
λD (DOMINANT WAVELENGTH) IF=20mA YELLOW 590nm TYP.



**SCHEMATIC**



- RJ45
- 1 TRP1+
- 2 TRP1-
- 3 TRP2+
- 6 TRP2-
- 4 TRP3+
- 5 TRP3-
- 7 TRP4+
- 8 TRP4-

ORIGINATED BY  
CHOW WANCHUNG  
DATE 2015-08-15

DRAWN BY  
HU XIANG  
DATE 2015-08-15

TITLE  
2X1 10 Gigabit MagJack®

PATENTED

PART NO. / DRAWING NO.  
G23-21YR-112

FILE NAME  
G23-21YR-112\_PC.DWG

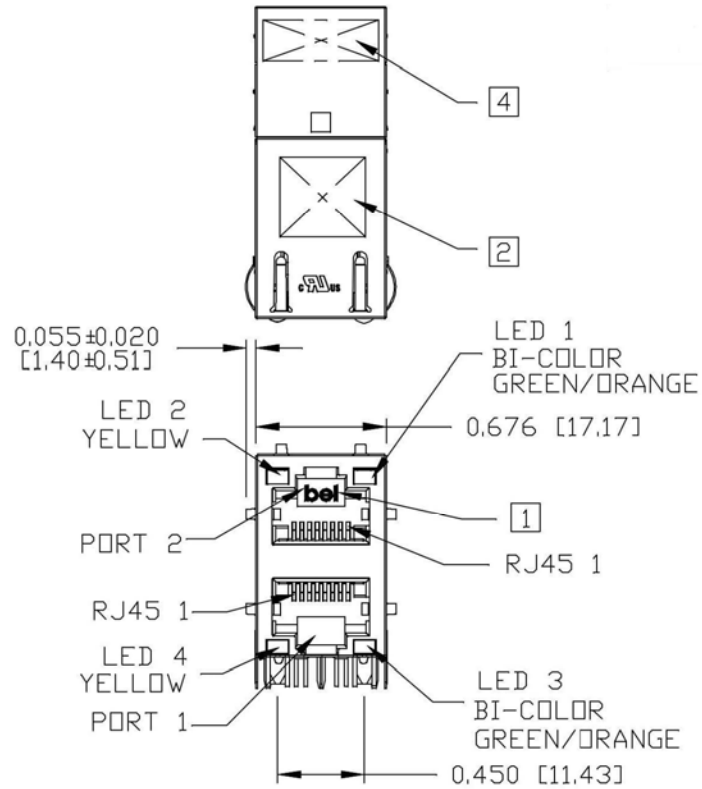
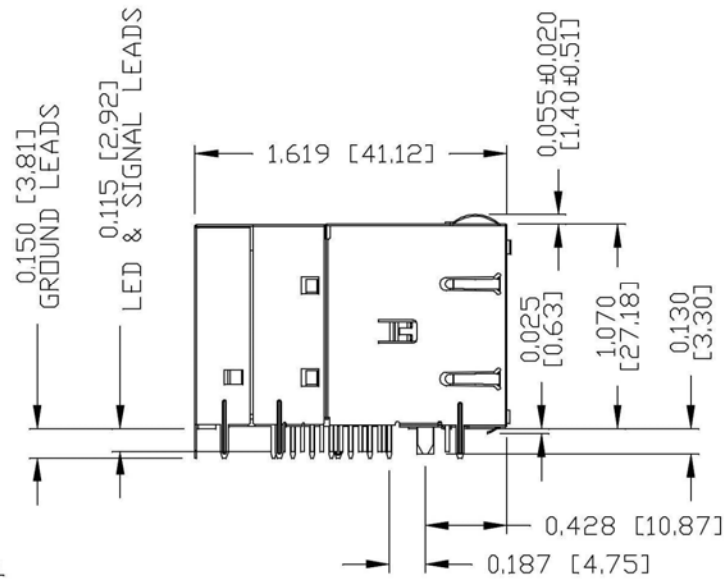
STANDARD DIM. [ ] METRIC DIM.  
TOL. IN INCH AS REF.

.X UNIT : INCH [mm]  
.XX SCALE : N/A  
.XXX SIZE : A4

REV. : PC PAGE : 2



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**NOTES:**

- PLASTIC HOUSING: THERMOPLASTIC PBT  
FLAMMABILITY RATING UL 94V-0
- CONTACT PLATING: 50 MICRO-INCH HARD GOLD PLATING OR EQUIVALENT
- OUTPUT PINS: TIN-COATED COPPER WIRE, DIA 0.018 INCH.
- METAL SHIELD: NICKEL PLATED ON COPPER ALLOY,  
(ALL GROUND LEADS ARE SOLDER DIPPED)

- [1] JACK CAVITY CONFORMS TO FCC RULES AND REGULATIONS, PART 68 SUBPART F.
- [2] MARK PART WITH MFG LOGO, NAME, PART NUMBER AND DATE CODE.

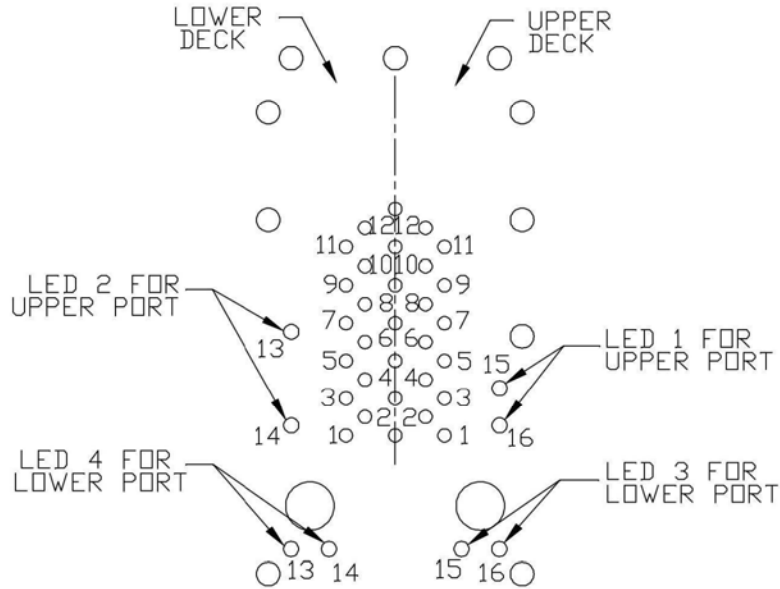
- 3. THE PRODUCT IS RoHS COMPLIANT  
UL RECOGNIZED - FILE #E169987.
- [4] THE PRODUCT IS PATENTED. "PATENTED" MARKING IS ON THE TOP SURFACE. THE PATENT NUMBER ARE U.S. PAT. 7,429,195 & U.S. PAT. 5,736,910 & U.S. PAT. 6,840,817 & U.S. PAT. 7,123,117 AND U.S. PAT. 7,924,130.
- 5. THE AXIAL RETENTION FORCE OF RJ PORT IS 15LBS MIN.

REV. :	PC	PAGE :	3
		UNIT : INCH [mm]	
		SCALE : N/A	
		SIZE : A4	
			

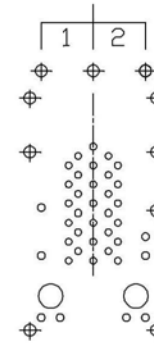
ORIGINATED BY SANDY LIN DATE 2015-08-15	TITLE 2X1 10 Gigabit MagJack® PATENTED	PART NO. / DRAWING NO. G23-21YR-112	STANDARD DIM. TOL. IN INCH	[ ] METRIC DIM. AS REF.
DRAWN BY XUE RIPING DATE 2015-08-15		FILE NAME G23-21YR-112_PC.DWG	.X	
			.XX	
			.XXX	±0.010

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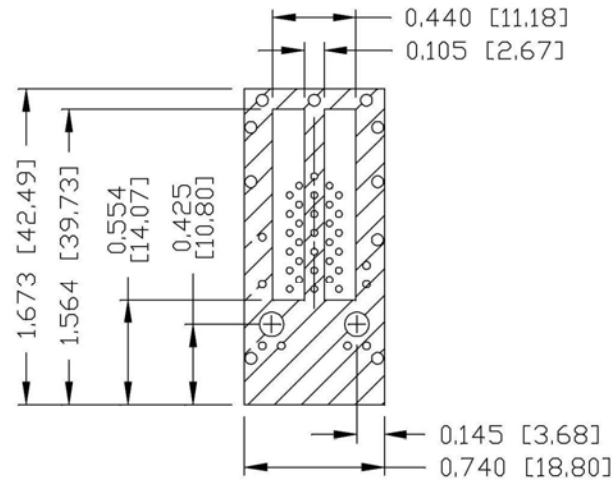


PORT ASSIGNMENT  
(COMPONENT SIDE VIEW)



PIN-OUT INFORMATION  
(COMPONENT SIDE VIEW)

10	TRD4+		
9	TRCT3		
8	TRD3-		
7	TRD3+		
6	TRCT2	16	ORANGE(+)/GREEN(-)
5	TRD2-	15	ORANGE(-)/GREEN(+)
4	TRD2+	14	YELLOW (-)
3	TRCT1	13	YELLOW (+)
2	TRD1-	12	TRCT4
1	TRD1+	11	TRD4-



THE SHADED AREA ON THE CUSTOMER BOARD ARE RECOMMENDED TO BE CLEAR OFF ANY VIA HOLE OR COMPONENT PAD.

REV. : PC PAGE : 4

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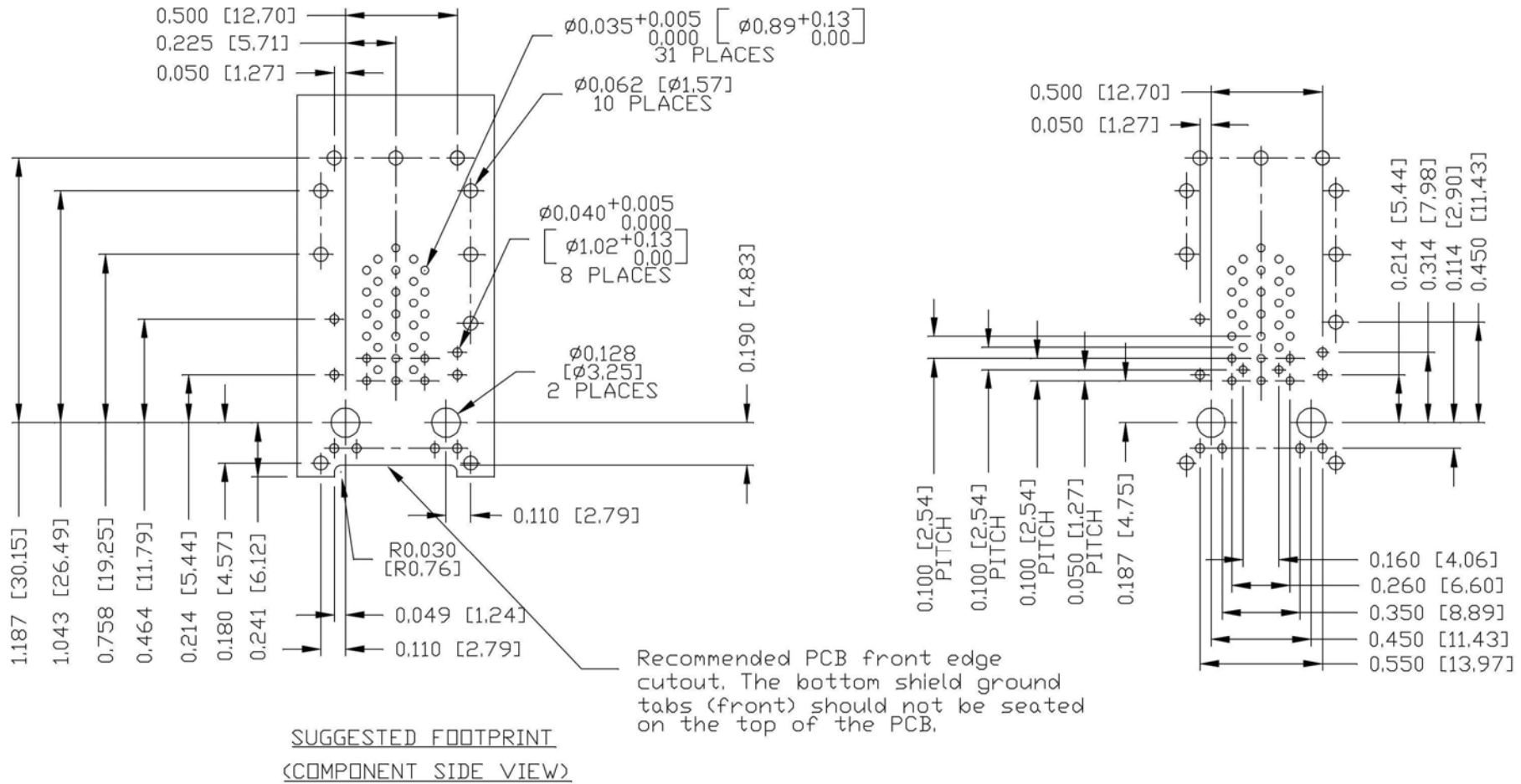
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.XXX ±0.004



SIZE : A4

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REV. : PC PAGE : 5

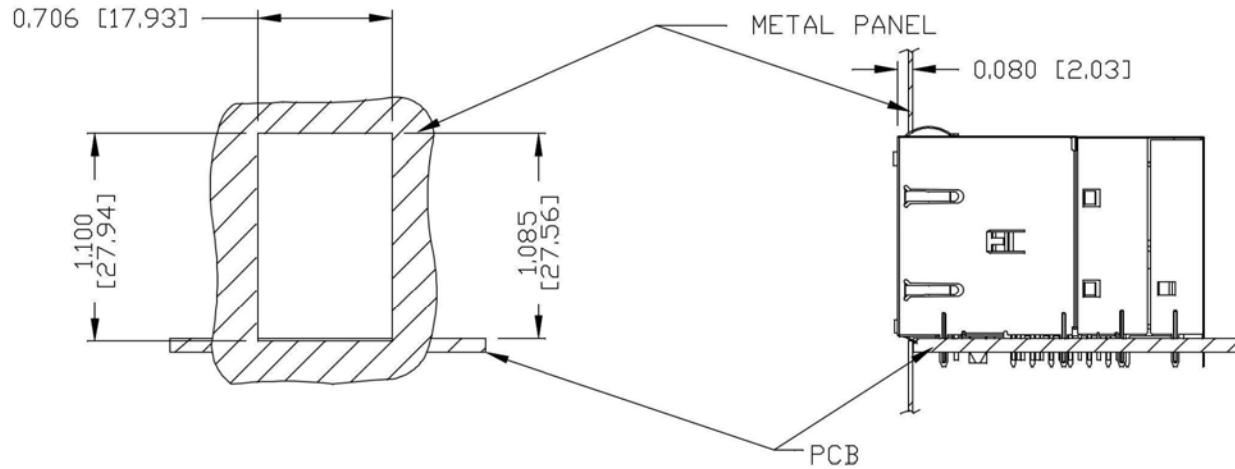


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SUGGESTED PANEL OPENING



NOTE:

THE DISTANCE OF PANEL INSIDE SURFACE RELATIVE TO FRONT SURFACE OF PART IS ONLY A SUGGESTION. IN CASE THIS DISTANCE IS DIFFERENT, THE REQUIRED PANEL OPENING DIMENSIONS CHANGE ACCORDINGLY.

PACKING INFORMATION

PACKING TRAY : 0200M9999-P3 (TOP)  
0200M9999-P2 (BOTTOM)

PACKING QUANTITY : 18 PCS FINISHED GOODS PER TRAY,  
9 TRAYS (162 PCS FINISHED GOODS) PER CARTON BOX.

REMARK : CARDBOARDS ARE PLACED BETWEEN LAYERS OF PACKING TRAY INSIDE CARTON BOX.  
(INCLUDE THE UPPERMOST AND LOWERMOST TRAY)

REV. :	PC	PAGE :	6
		[ ] METRIC DIM. AS REF.	
		UNIT : INCH [mm]	
		SCALE : N/A	
		SIZE :	A4

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			.XX	SCALE : N/A
			.XXX ±0.004	SIZE : A4

# Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Bel:

[G23-21YR-112](#)