

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
			-	+	ORANGE

PRELIMINARY



**ELECTRICAL CHARACTERISTICS @ 25°C**

<p>TURN'S RATIO</p> <p>TP1 1CT : 1CT</p> <p>TP2 1CT : 1CT</p> <p>TP3 1CT : 1CT</p> <p>TP4 1CT : 1CT</p>	<p>LED 2 &amp; 4</p> <p>13</p> <p>YELLOW</p> <p>14</p>
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<p>INS. LOSS (MAX)</p> <p>1MHz TO 20MHz -0.8 dB</p> <p>50MHz -1.0 dB</p> <p>200MHz -1.2 dB</p> <p>400MHz -2.0 dB</p> <p>500MHz -3.0 dB</p>	<p>LED 1 &amp; 3</p> <p>15</p> <p>ORANGE</p> <p>16</p>
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<p>RET. LOSS (MIN) @ 100 OHMS</p> <p>1MHz &lt; f &lt; 40MHz 16 dB MIN</p> <p>40MHz &lt; f &lt; 400MHz 16-10LOG(f/40MHz) dB</p> <p>400MHz &lt; f &lt; 500MHz 6-30LOG(f/400MHz) dB</p>	<p>COMMON MODE FILTER</p> <p>1CT : 1CT</p> <p>1CT : 1CT</p> <p>1CT : 1CT</p> <p>1CT : 1CT</p>
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<p>CM TO CM REJ</p> <p>1MHz - 500MHz -25 dB MIN</p>	<p>TRD1+ 1</p> <p>TRCT1 3</p> <p>TRD1- 2</p>
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<p>CM TO DM REJ</p> <p>1MHz - 500MHz -30 dB MIN</p>	<p>TRD2+ 4</p> <p>TRCT2 6</p> <p>TRD2- 5</p>
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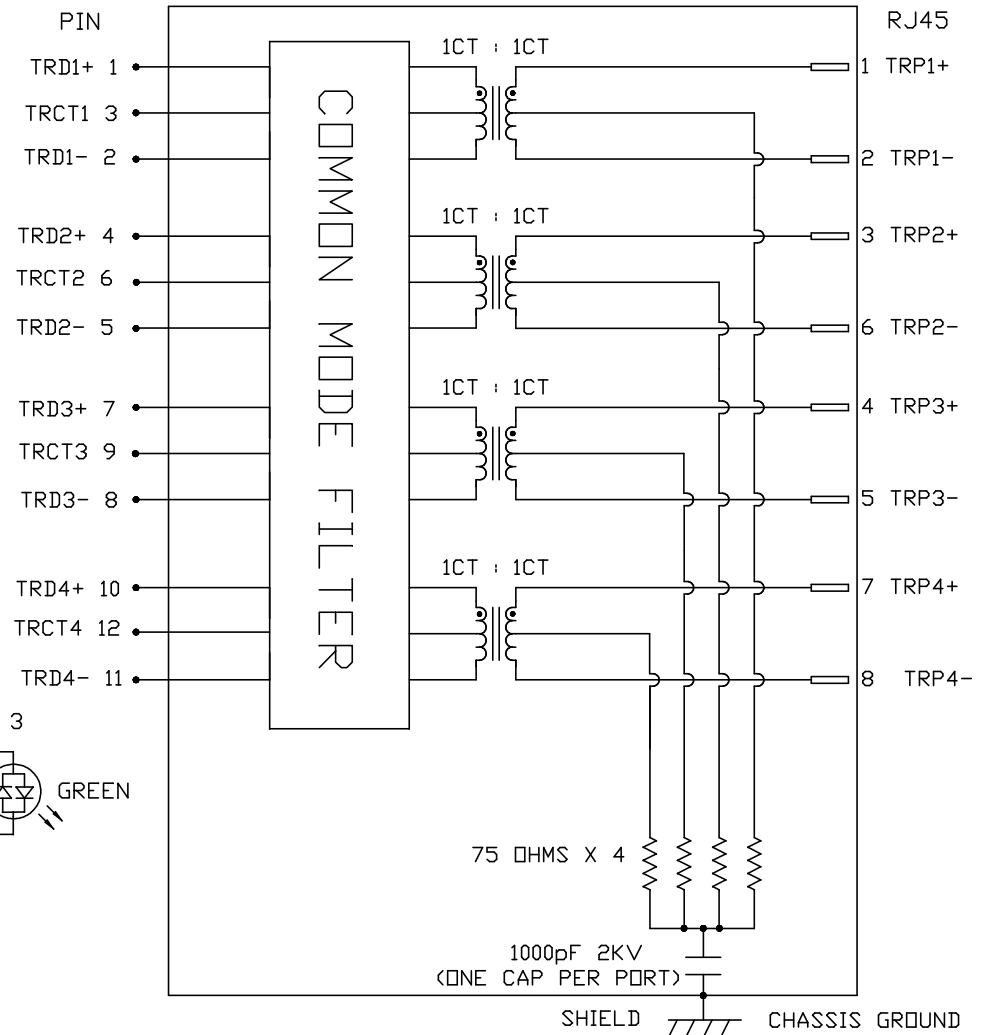
HIPOT (Isolation Voltage): 2250VDC  
 100% OF PRODUCTION TESTED TO COMPLY WITH IEEE 802.3 ISOLATION REQUIREMENTS.

LED 2 & 4  
 VF (FORWARD VOLTAGE) IF=20mA YELLOW 2.1V TYP.  
 λD (DOMINANT WAVELENGTH) IF=20mA YELLOW 590nm TYP.

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.

OPERATING TEMPERATURE: 0°C TO +70°C.

**SCHEMATIC**



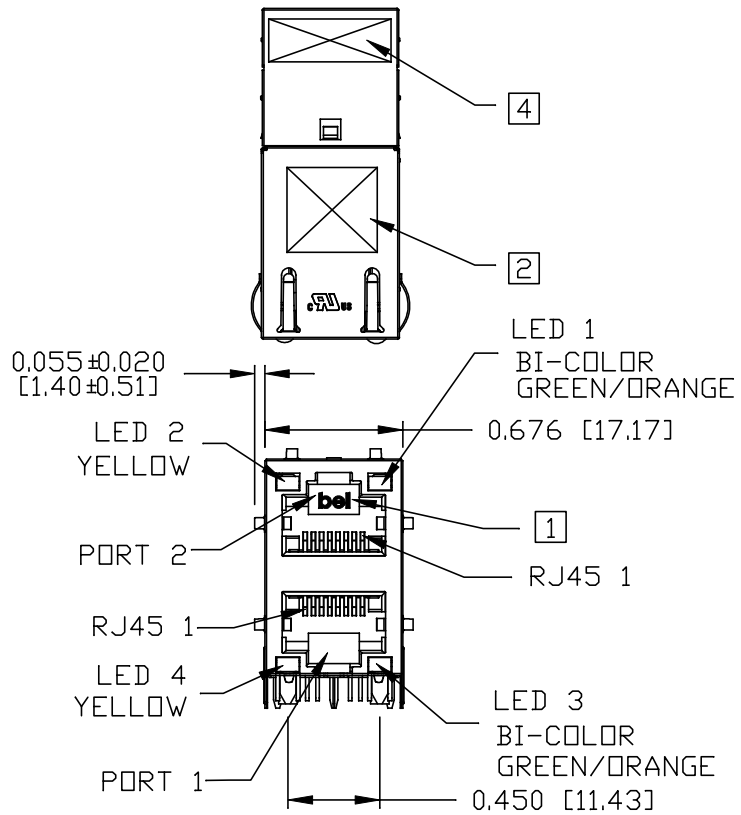
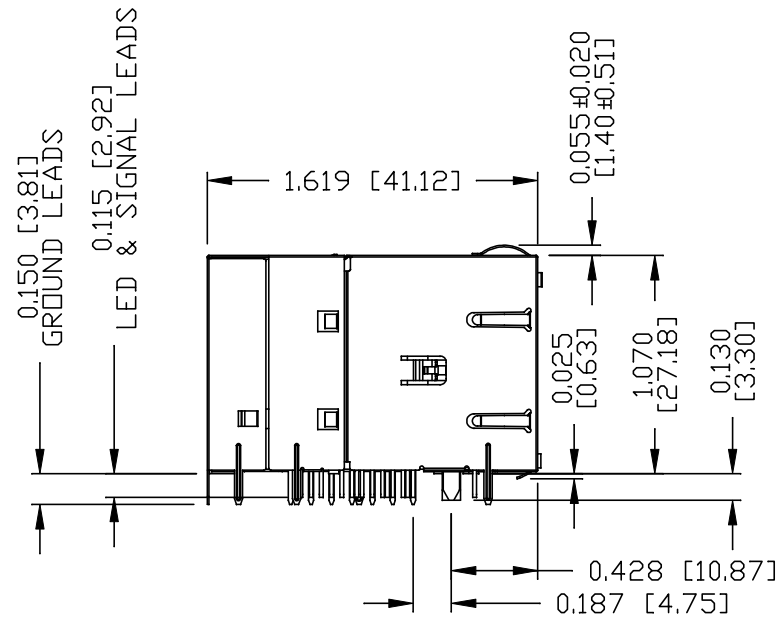
<p>ORIGINATED BY</p> <p>CHOW WANCHUNG</p> <p>DATE 2018-10-19</p>	<p>TITLE</p> <p>2X1 10 Gigabit MagJack®</p> <p>PATENTED</p>
<p>DRAWN BY</p> <p>XIE YIMING</p> <p>DATE 2018-10-19</p>	

<p>PART NO. / DRAWING NO.</p> <p>G23-21YR-010</p>	<p>STANDARD DIM.</p> <p>TOL. IN INCH</p>	<p>[ ] METRIC DIM.</p> <p>AS REF.</p>
<p>FILE NAME</p> <p>G23-21YR-010_PA.DWG</p>	<p>.X</p> <p>.XX</p> <p>.XXX</p>	<p>UNIT : INCH [mm]</p> <p>SCALE : N/A</p> <p>SIZE : A4</p>



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PRELIMINARY



NOTES:

- PLASTIC HOUSING: THERMOPLASTIC PBT, BLACK. 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. 100 MICRO-INCH MIN MATTE TIN. PINS ARE SOLDER DIPPED.
- 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. 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.
- 6. THE PART IS RECOMMENDED FOR WAVE SOLDERING. THE SUGGESTED PEAK WAVE SOLDERING CONDITION IS 260°C MAX AND 10 SECONDS MAX.

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ORIGINATED BY SANDY LIN DATE 2018-10-19	TITLE 2X1 10 Gigabit MagJack® PATENTED	PART NO. / DRAWING NO. G23-21YR-010		STANDARD DIM. [ ] METRIC DIM.	
		FILE NAME G23-21YR-010_PA.DWG		TOL. IN INCH	AS REF.
				.X	UNIT : INCH [mm]
				.XX	SCALE : N/A
DRAWN BY OLIVER ZHANG DATE 2018-10-19			.XXX	±0.010	SIZE : A4

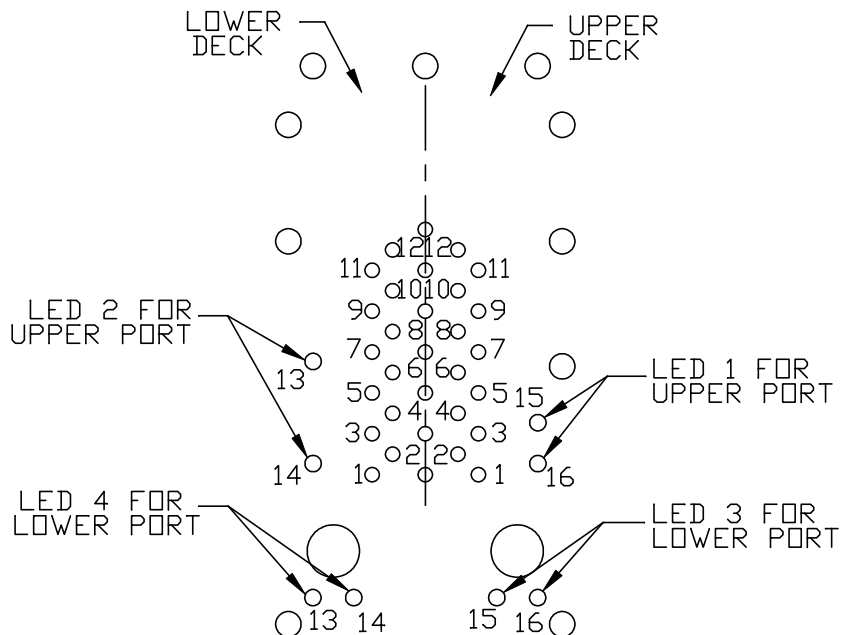


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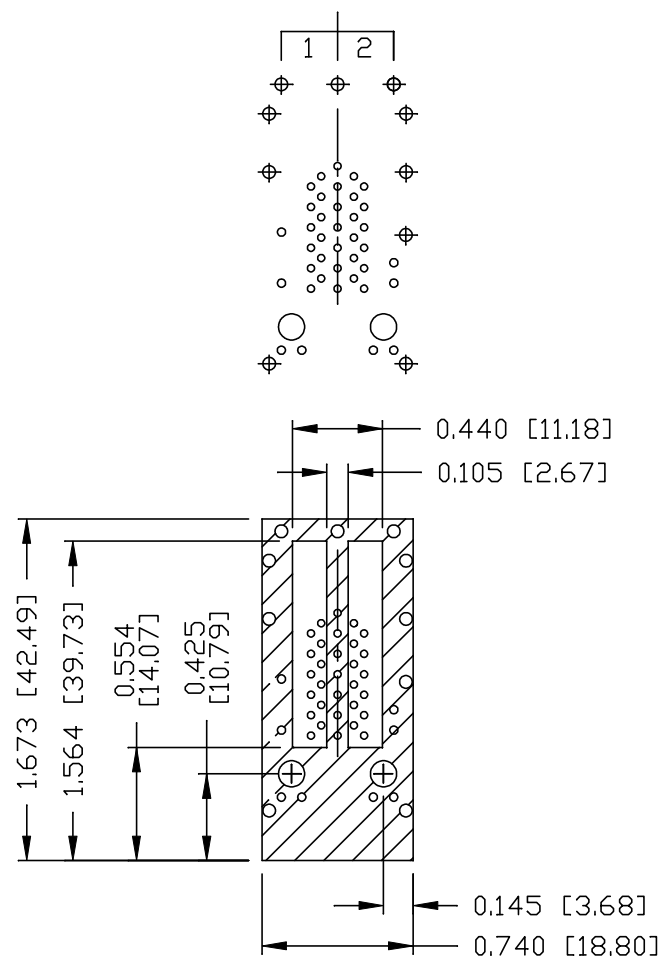
PORT ASSIGNMENT  
(COMPONENT SIDE VIEW)

RoHS



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.

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SANDY LIN  
DATE 2018-10-19

DRAWN BY  
OLIVER ZHANG  
DATE 2018-10-19

TITLE  
2X1 10 Gigabit MagJack®  
PATENTED

PART NO. / DRAWING NO.  
G23-21YR-010

FILE NAME  
G23-21YR-010\_PA.DWG

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

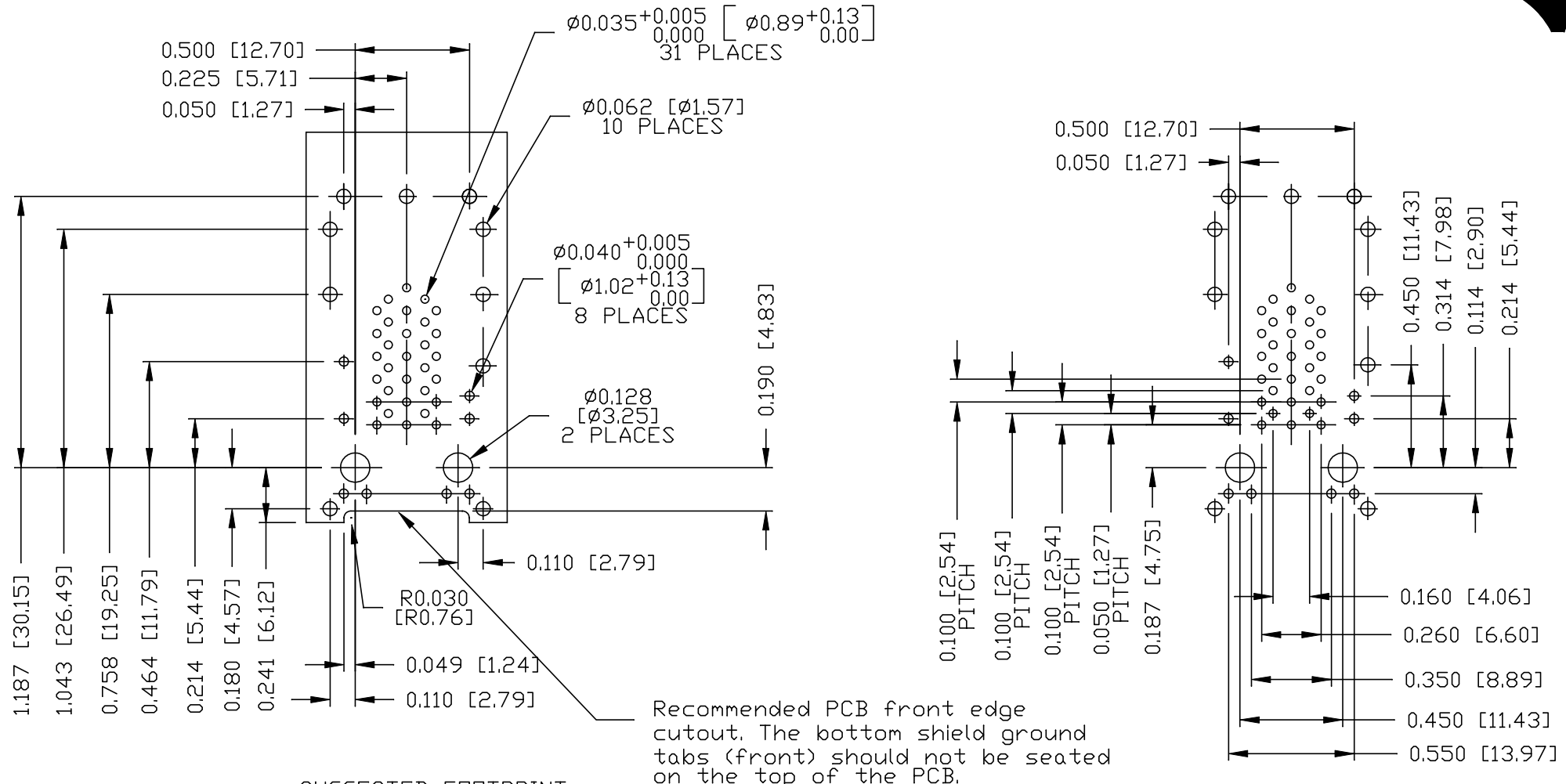
.X		UNIT : INCH [mm]
.XX		SCALE : N/A
.XXX	±0.004	SIZE : A4

REV. : PA PAGE : 4



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PRELIMINARY



SUGGESTED FOOTPRINT  
(COMPONENT SIDE VIEW)

Recommended PCB front edge cutout. The bottom shield ground tabs (front) should not be seated on the top of the PCB.

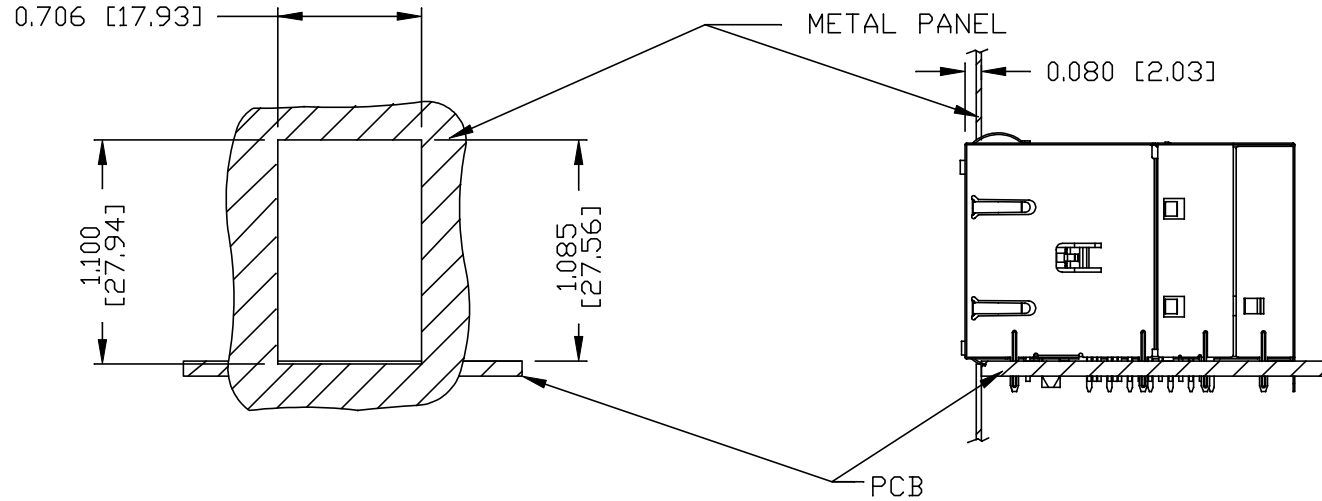
<b>ORIGINATED BY</b> SANDY LIN <b>DATE</b> 2018-10-19 <b>DRAWN BY</b> OLIVER ZHANG <b>DATE</b> 2018-10-19		<b>TITLE</b> 2X1 10 Gigabit MagJack® PATENTED		<b>PART NO. / DRAWING NO.</b> G23-21YR-010 <b>FILE NAME</b> G23-21YR-010_PA.DWG		<b>STANDARD DIM. TOL. IN INCH</b> .X .XX .XXX ±0.004		<b>[ ] METRIC DIM. AS REF.</b> UNIT : INCH [mm] SCALE : N/A SIZE : A4		<b>REV. :</b> PA	<b>PAGE :</b> 5
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SUGGESTED PANEL OPENING

PRELIMINARY



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)

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DATE 2018-10-19  
DRAWN BY  
OLIVER ZHANG  
DATE 2018-10-19

TITLE  
2X1 10 Gigabit MagJack®  
PATENTED

PART NO. / DRAWING NO.  
G23-21YR-010  
FILE NAME  
G23-21YR-010\_PA.DWG

STANDARD DIM. TOL. IN INCH	[ ] METRIC DIM. AS REF.
.X	UNIT : INCH [mm]
.XX	SCALE : N/A
.XXX ±0.005	SIZE : A4

