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LED1 POLARITY			LED2 POLARITY		
PIN 14	PIN 13	COLOR	PIN 12	PIN 11	COLOR
-	+	YELLOW	-	+	GREEN

RoHS



# ELECTRICAL CHARACTERISTICS @ 25°C

## URNS RATIO

TP1	1CT : 1CT ±3%
TP2	1CT : 1CT ±3%
TP3	1CT : 1CT ±3%
TP4	1CT : 1CT ±3%

## CL @ 100kHz/100mVRMS

8mA DC BIAS	350µH MIN.
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## INS. LOSS

1MHz TO 100MHz	-1.1 dB MAX
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## RET. LOSS (MIN) @ 100 OHMS +/-15%

1MHz-40MHz	-18 dB
40MHz-100MHz	-12+20LOG(F/80MHz) dB

## CM TO CM REJ

1MHz - 100MHz	-20 dB MIN
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## CROSSTALK (TX - RX)

1MHz - 30MHz	-40 dB MIN
30MHz - 60MHz	-30 dB MIN

## HIPOT (Isolation Voltage): 1500 Vrms

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

## LED 1

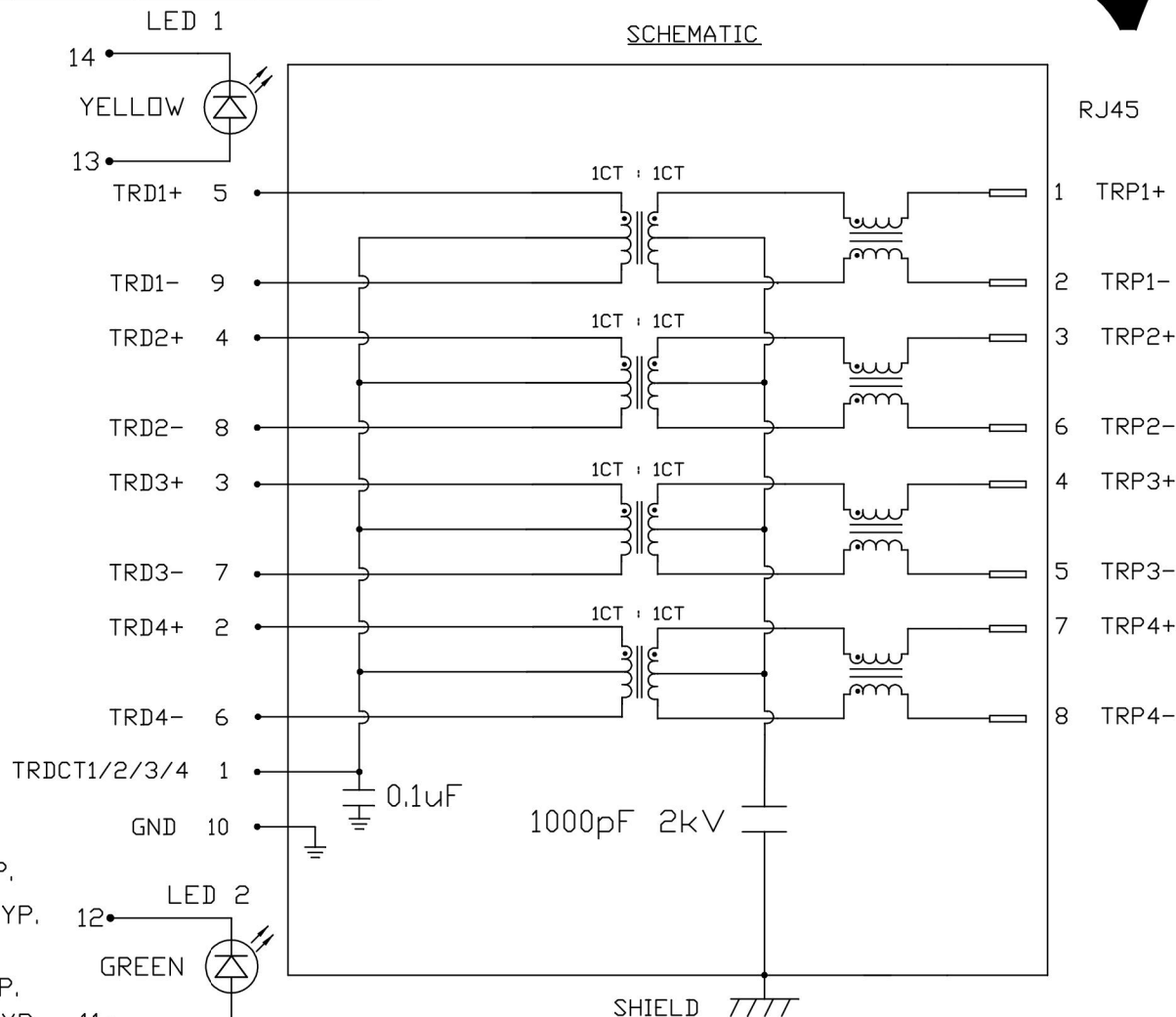
VF (FORWARD VOLTAGE) IF=20mA YELLOW 2.1V TYP.

λD (DOMINANT WAVELENGTH) IF=20mA YELLOW 590nm TYP.

## LED 2

VF (FORWARD VOLTAGE) IF=20mA GREEN 2.2V TYP.

λD (DOMINANT WAVELENGTH) IF=20mA GREEN 570nm TYP.



ORIGINATED BY  
CHOW WANCHUNG  
DATE 2015-07-16

## TITLE

gigabit MagJack®  
(8 core, Vertical)  
PATENTED

PART NO. / DRAWING NO.  
V890-1AX1-A1

FILE NAME  
V890-1AX1-A1\_E.DWG

STANDARD DIM.  
TOL. IN INCH

.X  
.XX  
.XXX

[ ] METRIC DIM.  
AS REF.

UNIT : INCH [mm]  
SCALE : N/A  
SIZE : A4

REV. : E

PAGE : 2

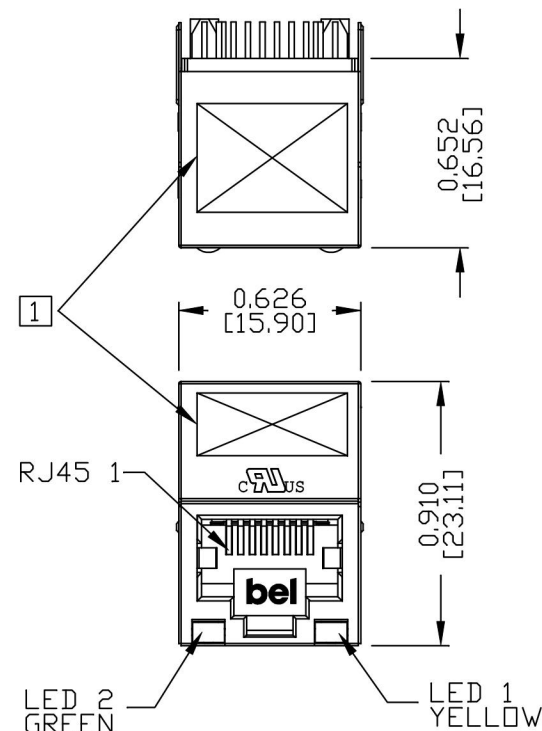
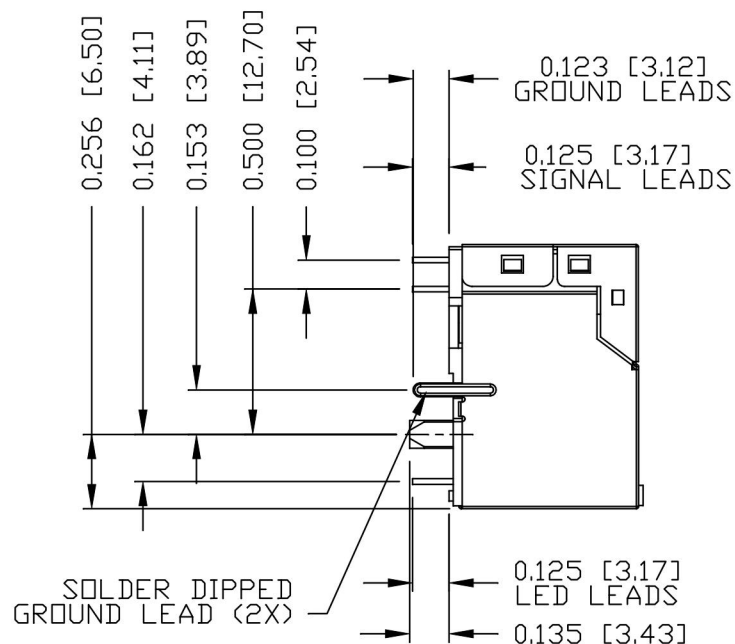


**bel** MAGNETIC SOLUTIONS  
a bel group

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# MECHANICAL SPECIFICATION



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## NOTES:

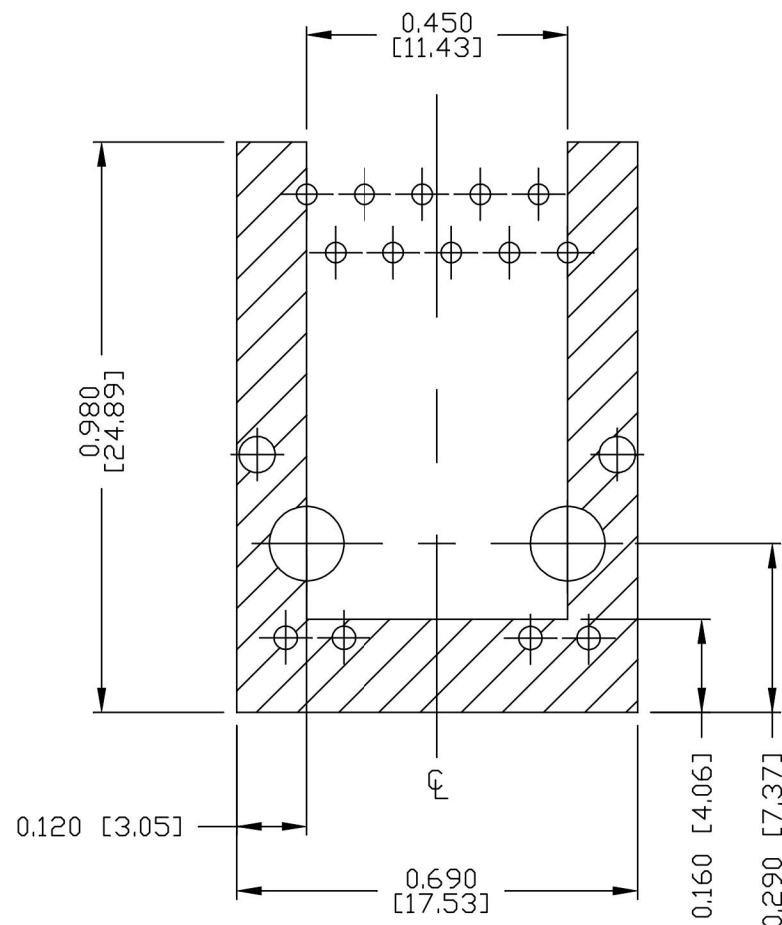
- PLASTIC HOUSING: THERMOPLASTIC PBT.  
FLAMMABILITY RATING UL 94V-0  
CONTACTS: 30 MICRO-INCH HARD GOLD PLATING OR EQUIVALENT.  
OUTPUT PINS: TIN-COATED COPPER WIRE, DIA 0.018 INCH.  
METAL SHIELD: NICKEL PLATED ON COPPER ALLOY.  
(ALL GROUND LEADS ARE SOLDER DIPPED)  
JACK CAVITY CONFORMS TO FCC RULES AND REGULATIONS.  
1. MARK PART WITH MFG LOGO, MFG NAME, PART NUMBER, DATE CODE AND PATENTED.  
2. THE PRODUCT IS RoHS COMPLIANT.

- c<sup>us</sup> UL RECOGNIZED - FILE #E196366 AND E169987.  
3. THE PRODUCT IS PATENT PRODUCT, THE PATENT NUMBER ARE U.S. PAT. 5,736,910 AND U.S. PAT. 6,840,817.

<b>ORIGINATED BY</b> ANTON LIAO <b>DATE</b> 2015-07-16	<b>TITLE</b>  gigabit MagJack® (8 core, Vertical) PATENTED	<b>PART NO. / DRAWING NO.</b> V890-1AX1-A1	<b>STANDARD DIM.</b> TOL. IN INCH	<b>[ ] METRIC DIM.</b> AS REF.	<b>REV. :</b> E <b>PAGE :</b> 3
<b>DRAWN BY</b> LIU DONGJUN <b>DATE</b> 2015-07-16		<b>FILE NAME</b> V890-1AX1-A1_E.DWG	.X .XX .XXX	UNIT : INCH [mm] SCALE : N/A SIZE : A4	 <b>bel</b> MAGNETIC SOLUTIONS a bel group
			±0.010		

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# NOTES

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

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 DATE 2015-07-16

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FILE NAME  
 V890-1AX1-A1\_E.DWG

STANDARD DIM.  
 TOL. IN INCH

.X  
 .XX  
 .XXX ±0.004

[ ] METRIC DIM.  
 AS REF.

UNIT : INCH [mm]  
 SCALE : N/A  
 SIZE : A4

REV. : E

PAGE : 4



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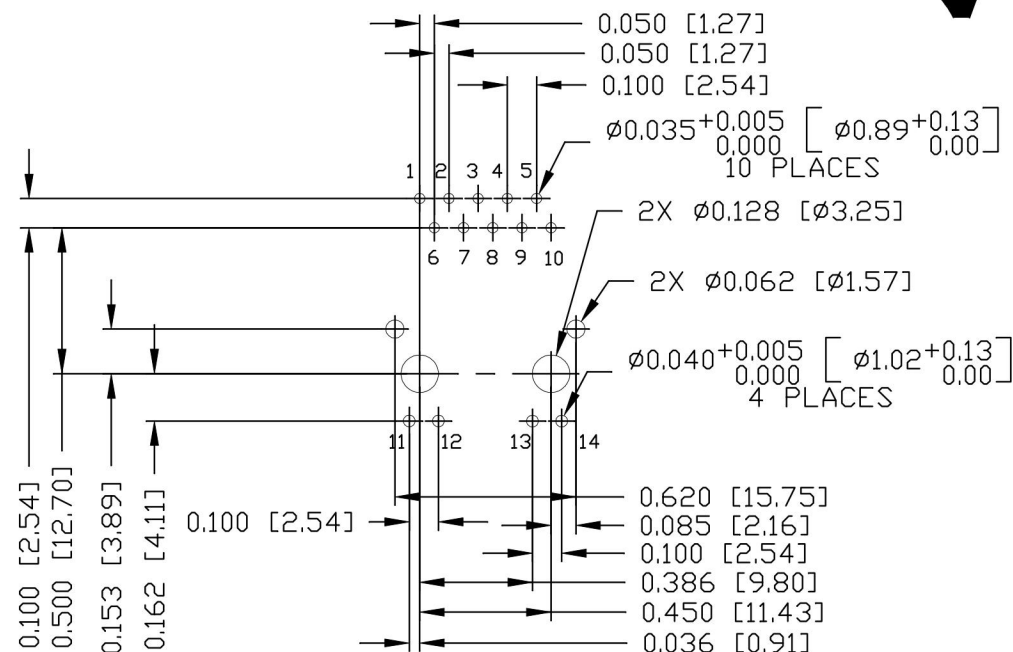
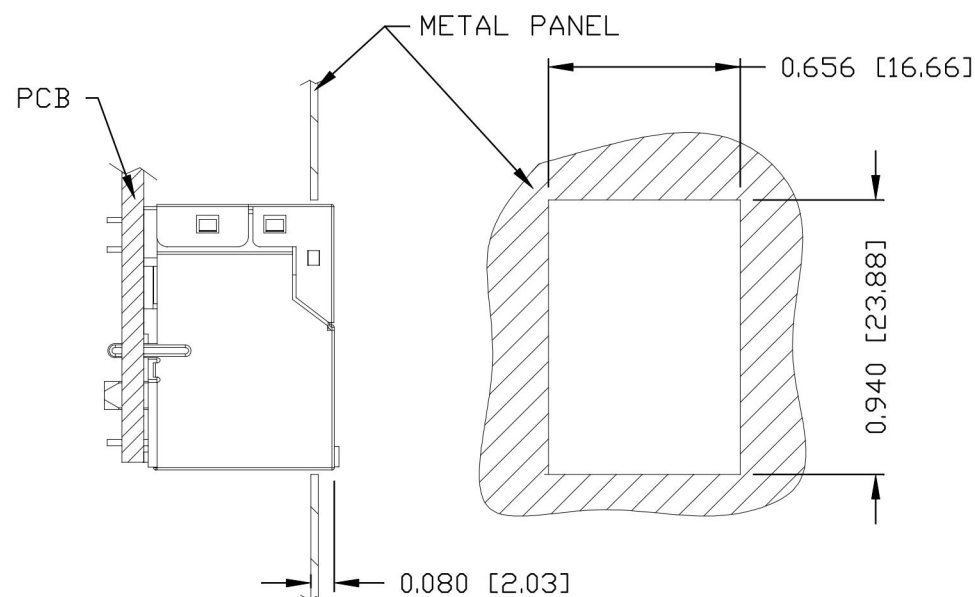
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# RECOMMENDED PCB FOOTPRINT COMPONENT SIDE VIEW

RoHS



## SUGGESTED PANEL OPENING



## NOTES:

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 : 0200-9999-I3(TOP)

0200-9999-I4(BOTTOM)

PACKING QUANTITY : 55 PCS FINISHED GOODS PER TRAY  
9 TRAYS (495 PCS FINISHED GOODS)  
PER CARTON BOX

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

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