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## 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)

1MHz - 40MHz	-16 dB
40MHz - 400 MHz	-16+10LOG (F/40) dB
400MHz - 500 MHz	-6+30LOG (F/400) dB

### CM TO CM REJ

1MHz - 500MHz	-30 dB MIN
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### CM TO DM REJ

1MHz - 500MHz	-30 dB MIN
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### HIPOT (Isolation Voltage):

2250VDC  
100% OF PRODUCTION TESTED TO COMPLY WITH IEEE 802.3 ISOLATION REQUIREMENTS.

### OPERATING TEMPERATURE: 0°C TO +70°C.

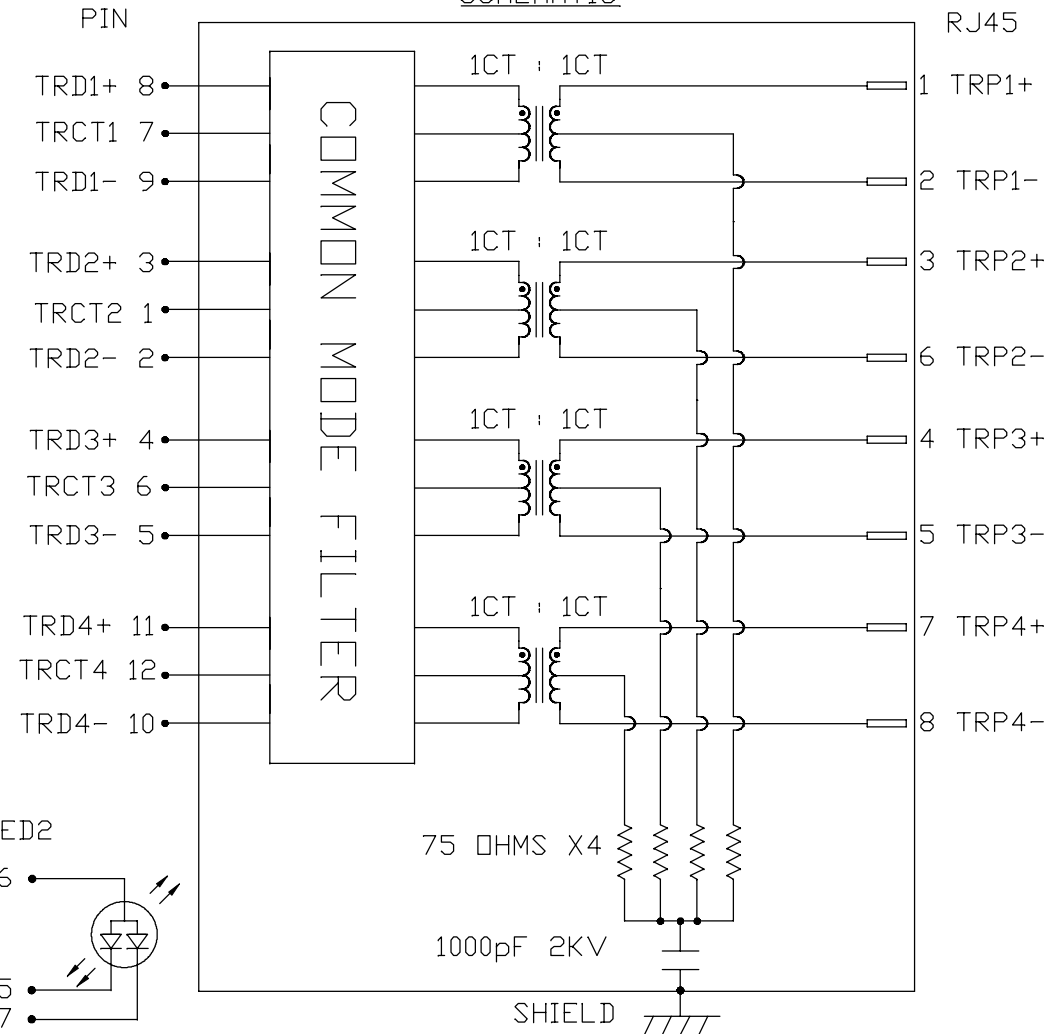
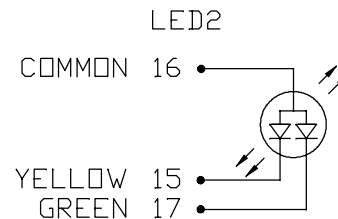
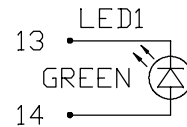
#### LED 1

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

#### LED 2

VF (FORWARD VOLTAGE)	IF=20mA	GREEN	2.2V TYP.
		YELLOW	2.1V TYP.
λD (DOMINANT WAVELENGTH)	IF=20mA	GREEN	570nm TYP.
		YELLOW	590nm TYP.

LED1 POLARITY			LED2 POLARITY			
PIN 13	PIN 14	COLOR	PIN 15	PIN 16	PIN 17	COLOR
-	+	GREEN	-	+	/	YELLOW
/	/	/	/	+	-	GREEN



ORIGINATED BY  
CHOW WANCHUNG  
DATE 2017-03-17

DRAWN BY  
LINFENG LI  
DATE 2017-03-17

TITLE  
10 Gigabit MagJack®  
(Ultra Low Profile)  
G10-1GHT-012E  
PATENTED

PART NO. / DRAWING NO.  
G10-1GHT012E

FILE NAME  
G10-1GHT012E\_B.DWG

STANDARD DIM.  
TOL. IN INCH

.X  
.XX  
.XXX

[ ] METRIC DIM.  
AS REF.

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

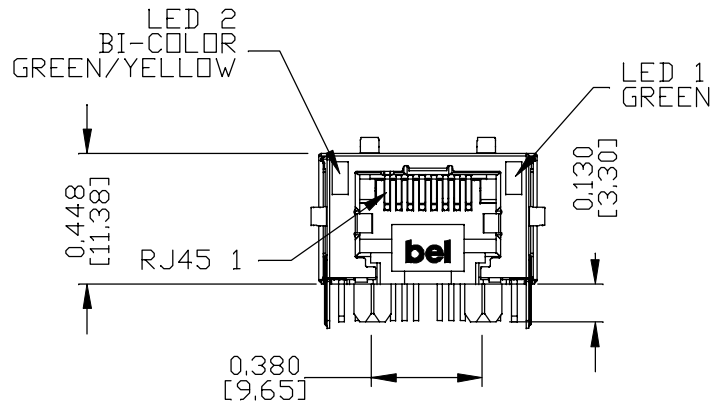
REV. : B

PAGE : 2



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## MECHANICAL SPECIFICATION



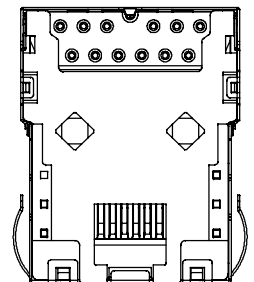
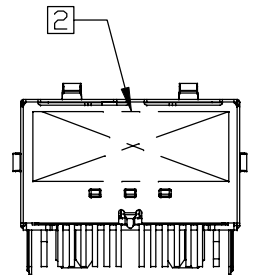
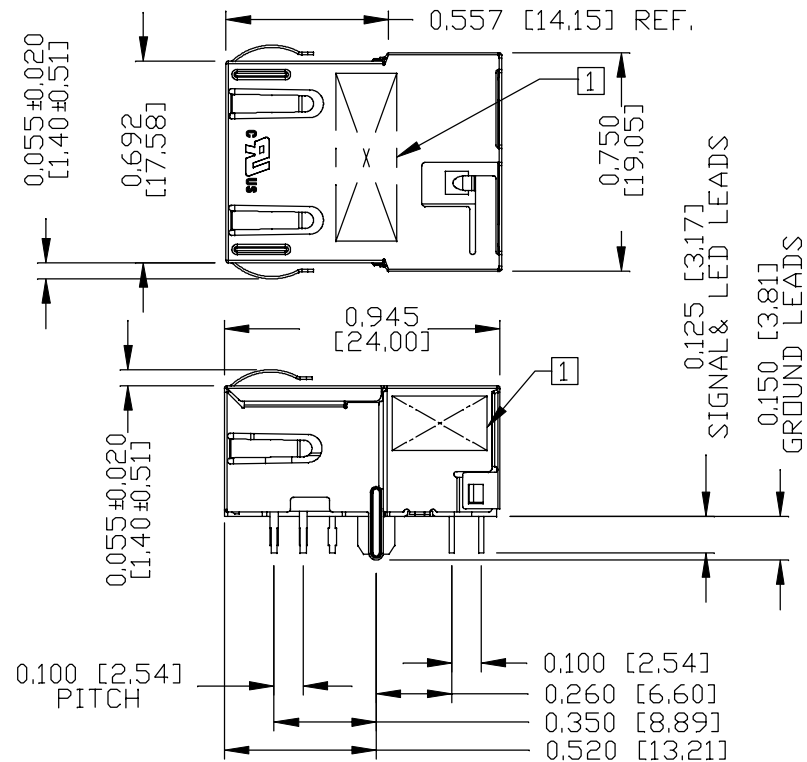
## NOTES:

PLASTIC HOUSING: THERMOPLASTIC PA, BLACK.  
FLAMMABILITY RATING UL 94V-0

CONTACTS: 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. MARK PART WITH PART NUMBER (G10-1GHT-012E), DATE CODE AND PATENTED.
2. MARK PART WITH MFG. LOGO, MFG. NAME ON BACK VIEW.
3. THE PRODUCT IS RoHS COMPLIANT AND HALOGEN FREE.  
JACK CAVITY CONFORMS TO FCC RULES AND REGULATIONS.



BOTTOM VIEW



UL RECOGNIZED - FILE #E169987.

4. THE PART IS RECOMMENDED FOR WAVE SOLDERING. THE SUGGESTED PEAK WAVE SOLDERING CONDITION IS 260°C MAX AND 10 SECONDS MAX.

5. THE PRODUCT IS PATENT PRODUCT. THE PATENT NUMBER ARE  
U.S. PAT. 7,429,195 & U.S. PAT. 7,123,117 & U.S. PAT. 6,840,817  
AND U.S. PAT. 7,924,130.

6. THE AXIAL RETENTION FORCE OF RJ PORT IS 15LBS MIN.

ORIGINATED BY  
LI QUANKUN  
DATE 2017-03-17

DRAWN BY  
ZHANG XUEZHENG  
DATE 2017-03-17

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10 Gigabit MagJack®  
(Ultra Low Profile)  
G10-1GHT-012E  
PATENTED

PART NO. / DRAWING NO.  
G10-1GHT012E

FILE NAME  
G10-1GHT012E\_B.DWG

STANDARD DIM.  
TOL. IN INCH

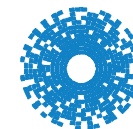
.X  
.XX  
.XXX

[ ] METRIC DIM.  
AS REF.

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

REV. : B

PAGE : 3



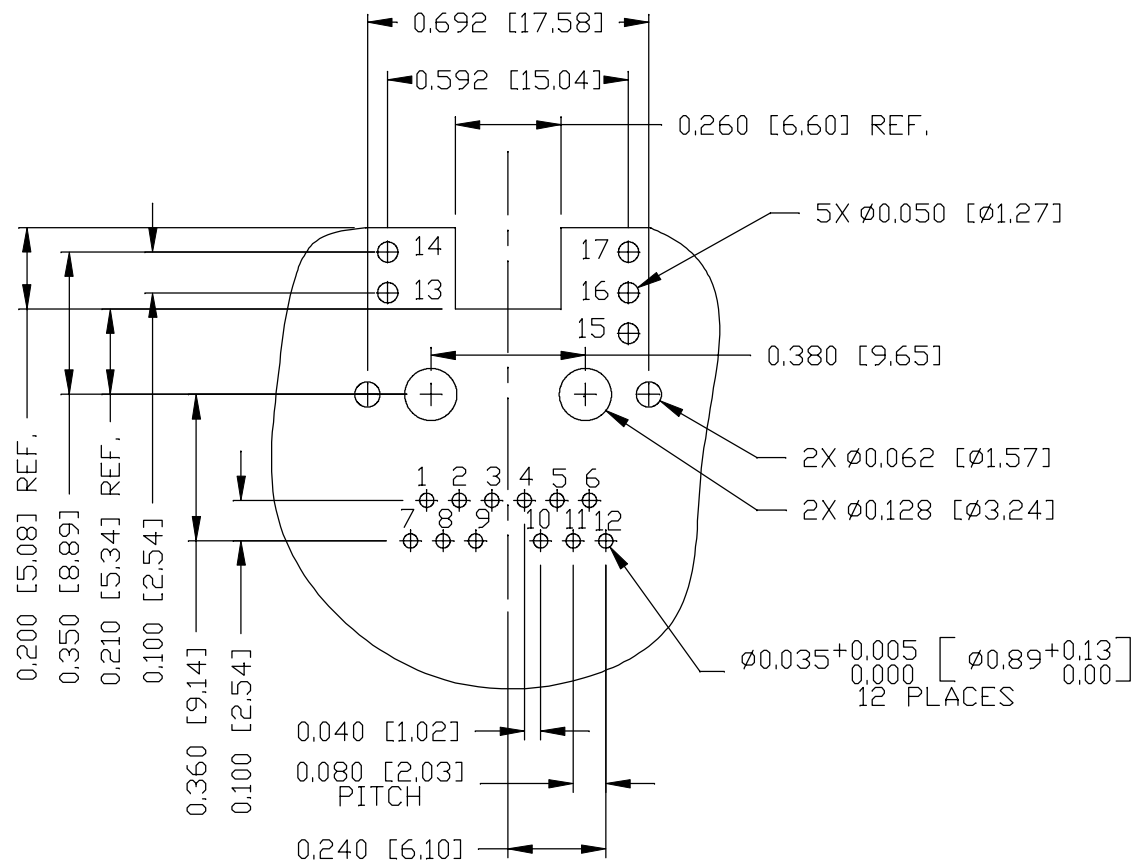
**bel** MAGNETIC SOLUTIONS  
a bel group

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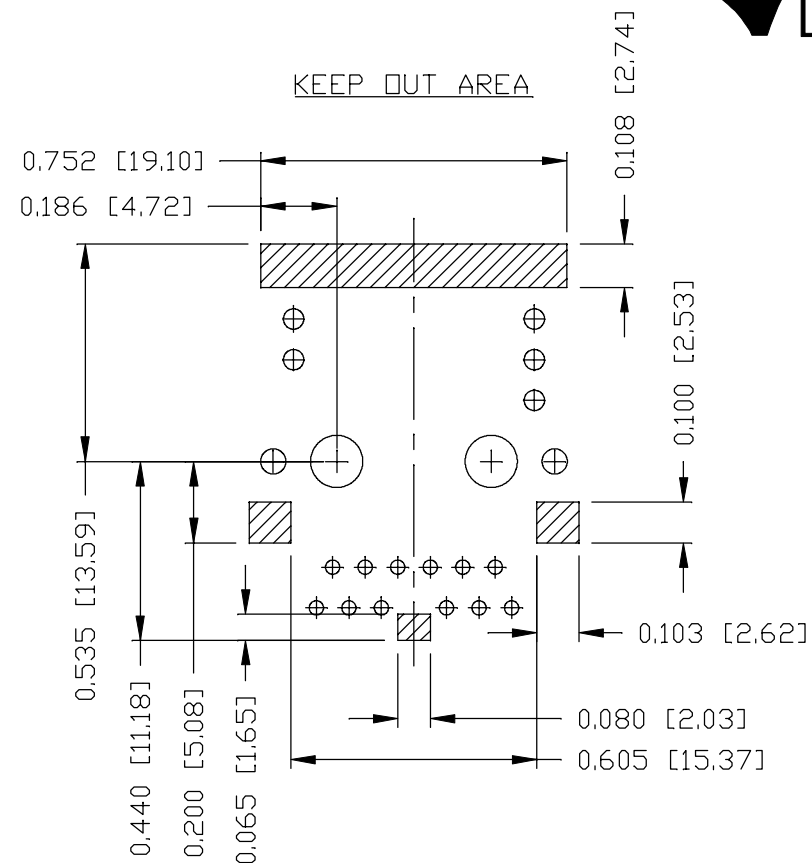
## RECOMMENDED PCB FOOTPRINT

COMPONENT SIDE VIEW



FOR ONE UNIT

KEEP OUT AREA




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

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DATE	2017-03-17
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DATE	2017-03-17


TITLE
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PART NO. / DRAWING NO.  
G10-1GHT012E

FILE NAME  
G10-1GHT012E\_B.DWG

STANDARD DIM. TOL. IN INCH		[ ] METRIC DIM AS REF.	
.X	/	UNIT : INCH [mm]	
.XX		SCALE : N/A	
yyy		 SIZE : A4	
±0.004			

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**bel** **MAGNETIC  
SOLUTIONS**

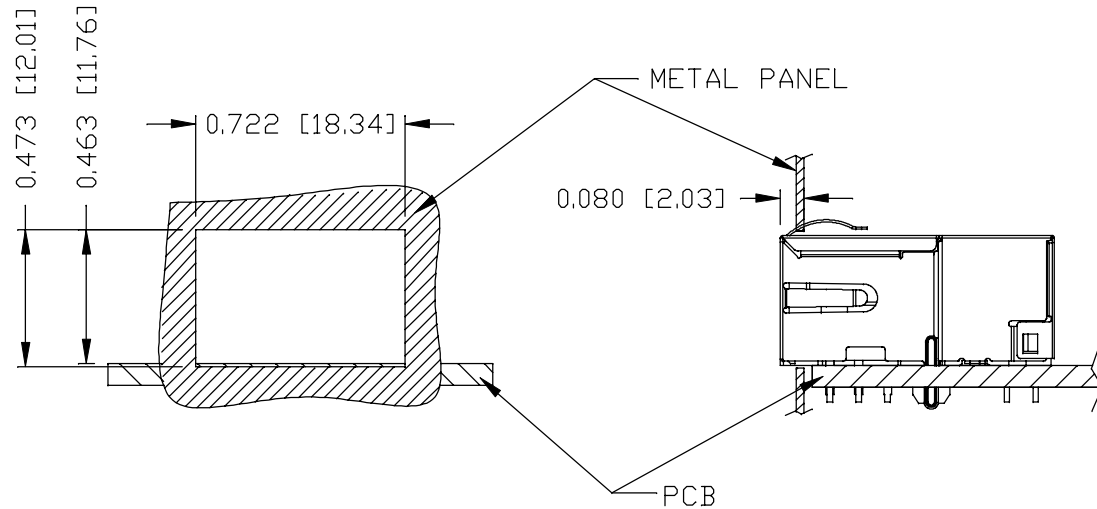
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### SUGGESTED PANEL OPENING



### 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.

### TRAY PACKING INFORMATION

PACKING TRAY : 0200-9999-E4 (TOP)  
0200-9999-E5 (BOTTOM)

PACKING QUANTITY : 60 PCS FINISHED GOODS PER TRAY  
11 TRAYS (660 PCS FINISHED GOODS) PER CARTON BOX

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

REV. : B	PAGE : 5
	

<b>ORIGINATED BY</b> LI QUANKUN <b>DATE</b> 2017-03-17 <b>DRAWN BY</b> ZHANG XUEZHENG <b>DATE</b> 2017-03-17	<b>TITLE</b> 10 Gigabit MagJack® (Ultra Low Profile) G10-1GHT-012E PATENTED	<b>PART NO. / DRAWING NO.</b> G10-1GHT012E <b>FILE NAME</b> G10-1GHT012E_B.DWG	<b>STANDARD DIM. TOL. IN INCH</b>		<b>[ ] METRIC DIM. AS REF.</b>
			.X		UNIT : INCH [mm]
			.XX		SCALE : N/A
			.XXX	±0.004	SIZE : A4