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ELECTRICAL CHARACTERISTICS @ 25°C

1.0 INDUCTANCE:

- (P2-P3) 350uH MIN. @ 0.1V, 100KHz, 8mA DC BIAS
- (P4-P5) 350uH MIN. @ 0.1V, 100KHz, 8mA DC BIAS
- (P7-P8) 350uH MIN. @ 0.1V, 100KHz, 8mA DC BIAS
- (P9-P10) 350uH MIN. @ 0.1V, 100KHz, 8mA DC BIAS

2.0 TURNS RATIO:

- (P2-P3): (J1-J2) 1CT : 1CT $\pm$ 2%
- (P4-P5): (J3-J6) 1CT : 1CT $\pm$ 2%
- (P7-P8): (J4-J5) 1CT : 1CT $\pm$ 2%
- (P9-P10): (J7-J8) 1CT : 1CT $\pm$ 2%

3.0 RETURN LOSS: 100 OHM REF.

- 500kHz TO 40MHz
- 40MHz TO 100MHz

4.0 INSERTION LOSS: RS=RL=100 OHMS

- 100kHz TO 100MHz

5.0 CROSS TALK: Ch1-Ch2, Ch1-Ch3, Ch1-Ch4, Ch2-Ch4, Ch3-Ch4

- 1MHz TO 30MHz -18dB MIN.
- 30MHz TO 80MHz -12+20LOG(f/80MHz) MIN.
- 80MHz TO 100MHz -1.2dB MAX.

6.0 CM TO CM REJECTION:

- 100kHz TO 100MHz -30dB MIN.

7.0 CM TO DM REJECTION:

- 100kHz TO 100MHz -35dB MIN.

8.0 VOLTAGE WITHSTAND:

- (J1,J2) TO (P2,P3) 1500Vrms
- (J3,J6) TO (P4,P5) 1500Vrms
- (J4,J5) TO (P7,P8) 1500Vrms
- (J7,J8) TO (P9,P10) 1500Vrms

9.0 THIS COMPONENT IS A PATENT PRODUCT;US PATENT NUMBER 7,123,117.

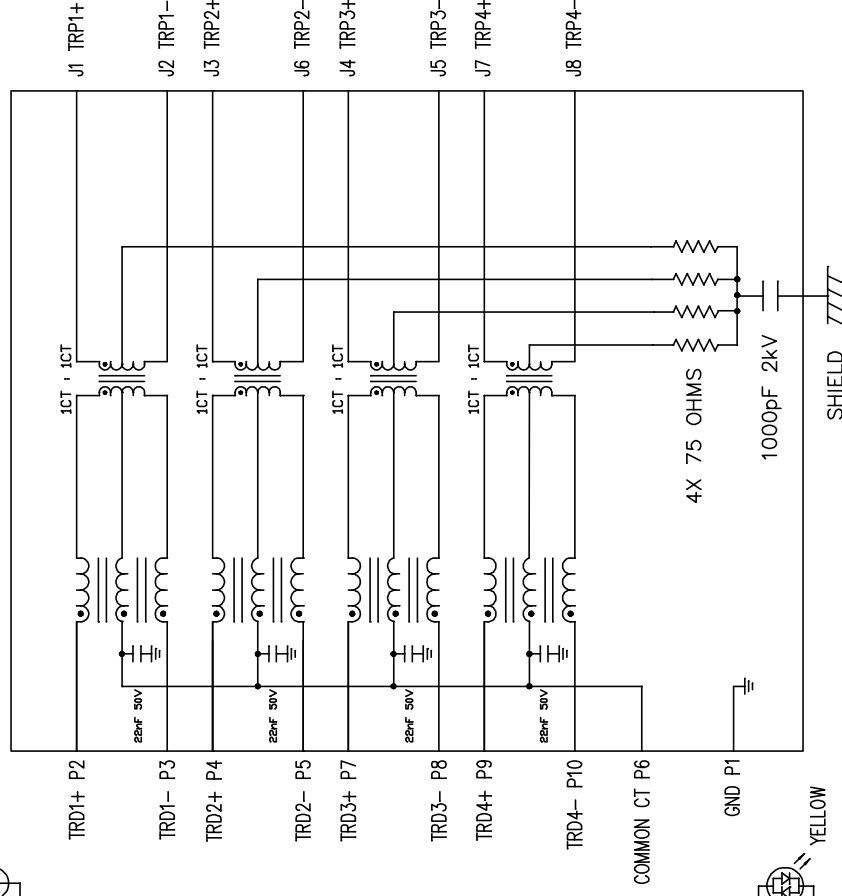
10.0 OPERATING TEMPERATURE RANGE: 0°C TO +70°C



PINS

RJ45

SCHEMATIC



ORIGINATED BY
CHOW WANCHUNG
DATE 2019-12-18

DRAWN BY
XIE YIMING
DATE 2019-12-18

TITLE
Gigabit MagJack®
TAB UP, SHIELDED
PATENTED

PART NO. / DRAWING NO.
SI-51009-F

FILE NAME
SI-51009-F_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



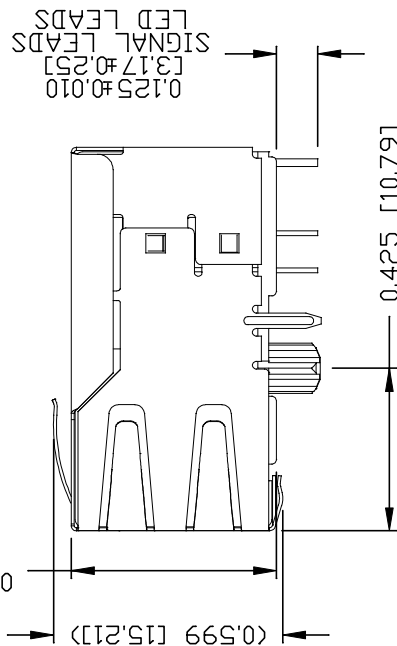
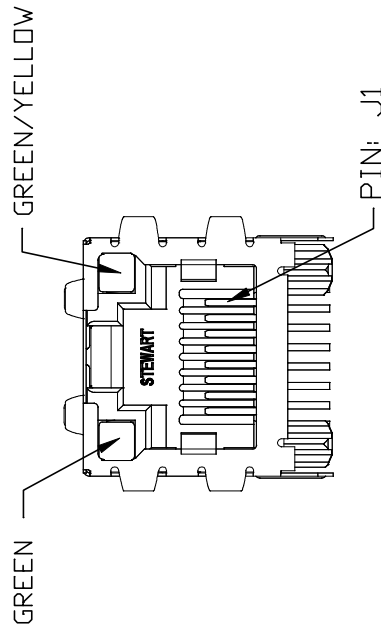
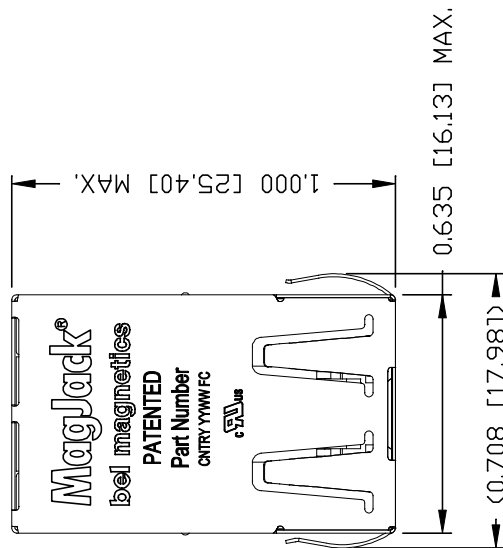
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NOTES:

1. CONNECTOR MATERIALS:
HOUSING: THERMOPLASTIC UL94 V-0
CONTACT/SHIELD: COPPER ALLOY
SHIELD PLATING: NICKEL OR TIN
CONTACT PLATING: SELECTIVE GOLD,
50 MICRO-INCHES MIN. IN CONTACT AREA.
2. PIN NOT ELECTRICALLY CONNECTED MAYBE OMITTED.
SEE ELECTRICAL DRAWING FOR OMITTED PINS.
3. TOLERANCES COMPLY WITH F.C.C. DIMENSION REQUIREMENTS.
4. THE PRODUCT IS RoHS COMPLIANT.
UL US UL RECOGNIZED - FILE #E474585.
5. THE PRODUCT IS RECOMMENDED FOR WAVE SOLDERING PROCESS,
PEAK TEMPERATURE 260°C MAX. AND 10 SECONDS MAX..

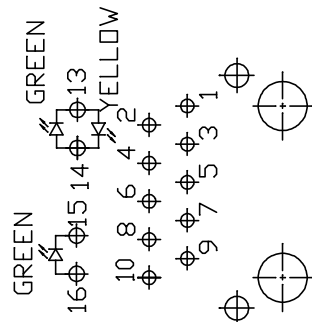


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ORIGINATED BY ANTON LIAO DATE 2019-12-18 DRAWN BY SANDY LIN DATE 2019-12-18		PART NO. / DRAWING NO. SI-51009-F FILE NAME SI-51009-F_B.DWG		STANDARD DIM. TOL. IN INCH TOL. IN	

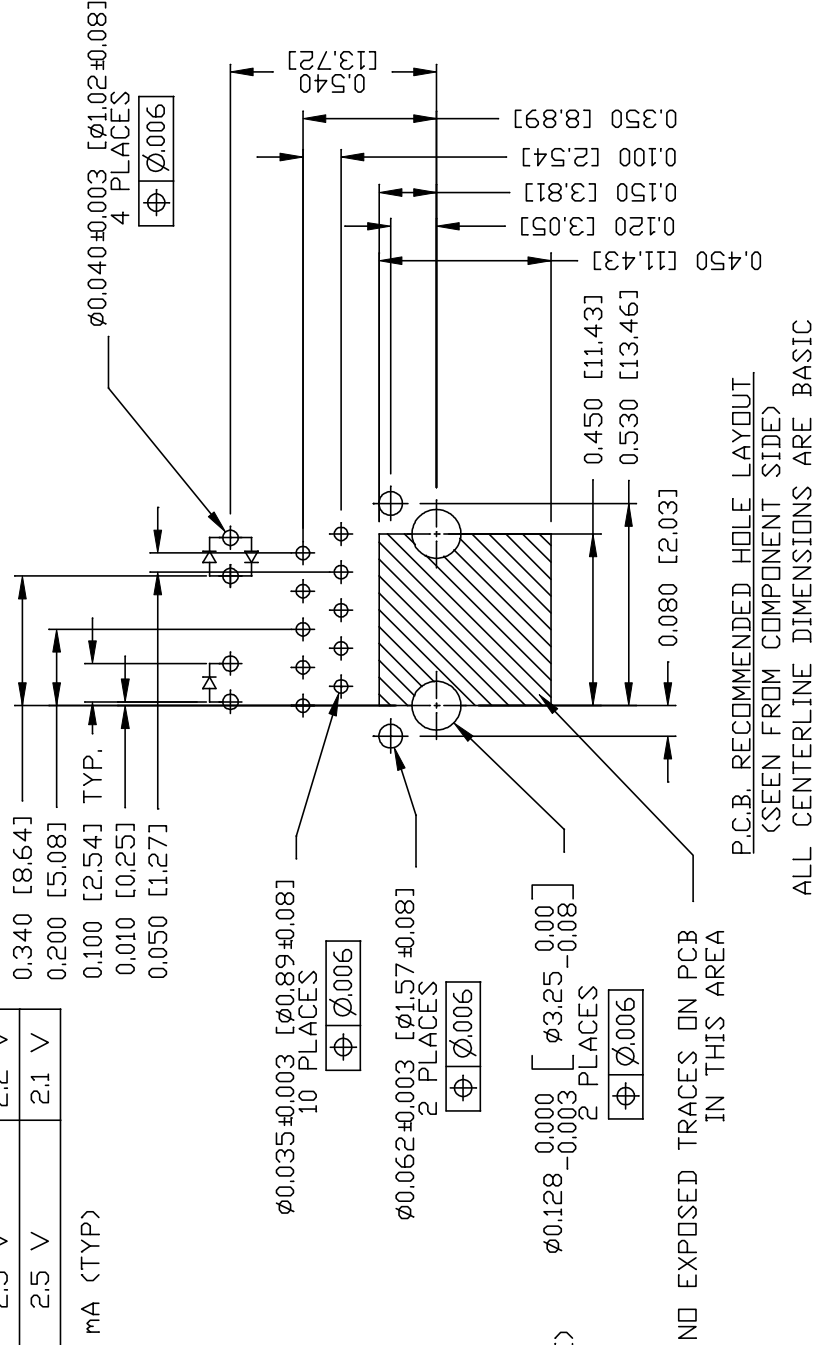
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LED SPECIFICATION			
LED COLOR	WAVELENGTH	FORWARD V (MAX)	*(TYP)
GREEN	565 nm	2.5 V	2.2 V
YELLOW	590 nm	2.5 V	2.1 V

*WITH A FORWARD CURRENT OF 20 mA (TYP)



PIN-OUT INFORMATION
(SEEN FROM COMPONENT SIDE)



Additional Resources: [Product Page](#) [Technical Documentation](#)

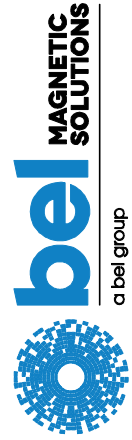
ORIGINATED BY
ANTON LIAO
DATE 2019-12-18
DRAWN BY
SANDY LIN
DATE 2019-12-18

TITLE
Gigabit MagJack®
TAB UP, SHIELDED
PATENTED

PART NO. / DRAWING NO.
SI-51009-F
FILE NAME
SI-51009-F_B.DWG

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

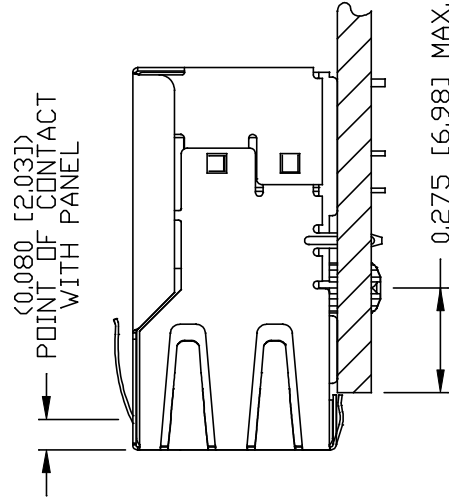
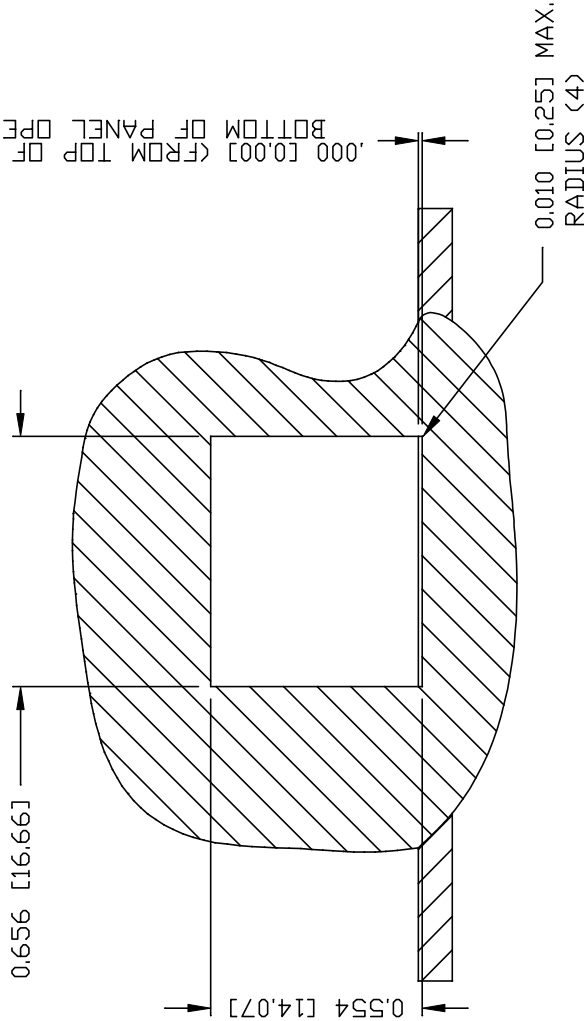
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NOTES:

THE SUGGESTED PANEL OPENING IS INTENDED
 TO GIVE THE USER THE ABILITY TO HAVE
 REASONABLE JACK / PANEL CLEARANCES
 YET MAINTAIN RELIABLE GROUNDING
 CAPABILITY.

SUGGESTED PANEL OPENING

ORIGINATED BY ANTON LIAO	TITLE Gigabit MagJack® TAB UP, SHIELDED PATENTED
DATE 2019-12-18	
DRAWN BY SANDY LIN	
DATE 2019-12-18	

PART NO. / DRAWING NO. SI-51009-F	STANDARD DIM. TOL. IN INCH .X .XX .XXX	[] METRIC DIM. AS REF.
FILE NAME SI-51009-F_B.DWG	UNIT : INCH [mm] SCALE : N/A	SIZE : A4

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 a bel group	

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