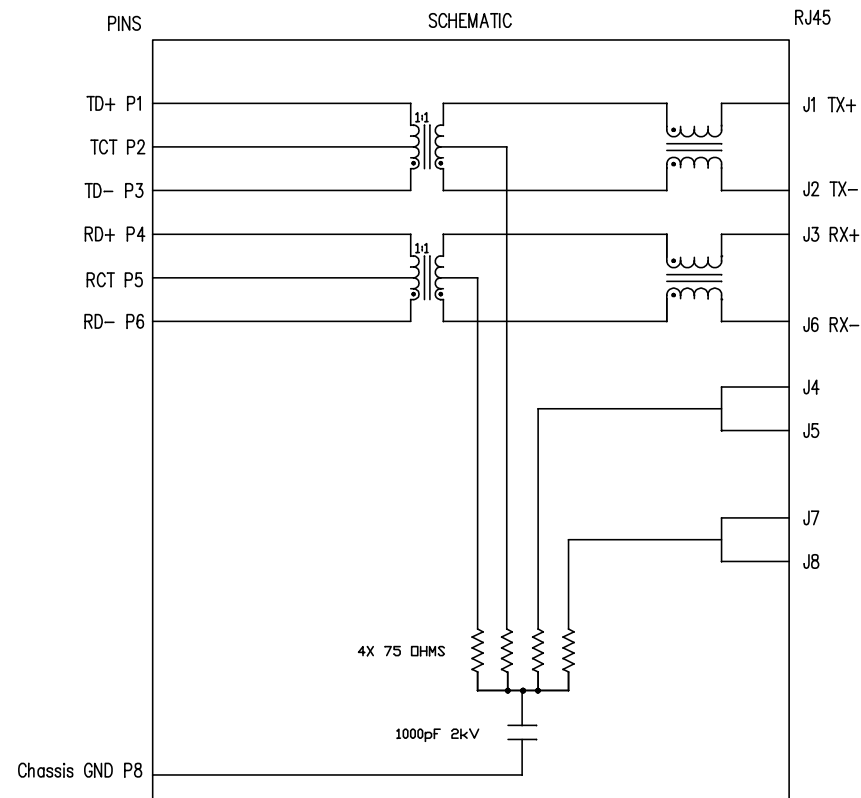


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ELECTRICAL CHARACTERISTICS @ 25°C

1.0 TURNS RATIO:(P4-P5-P6) : (J3-J6)	: 1CT : 1CT ± 3%
(P3-P2-P1) : (J2-J1)	: 1CT : 1CT ± 3%
2.0 INDUCTANCE:(P4-P6) : 350uH MIN. @ 0.1V, 100KHz, 8mA DC Bias	
(P3-P1) : 350uH MIN. @ 0.1V, 100KHz, 8mA DC Bias	
3.0 LEAKAGE INDUCTANCE:P6-P4 (WITH J6 AND J3 SHORT)	: 0.3uH MAX. @ 1MHz
P3-P1 (WITH J2 AND J1 SHORT)	: 0.3uH MAX. @ 1MHz
4.0 INTERWINDING CAPACITANCE:(P6,P5,P4) TO (J6,J3)	: 30pF MAX @ 1MHz
(P3,P2,P1) TO (J2,J1)	: 30pF MAX. @ 1MHz
5.0 DC RESISTANCE:(J6-J3)=(J2-J1)	: 1.35 ohms Max.
6.0 RETURN LOSS:(P4-P6)=100 OHMS AND (P1-P3)=100 OHM REF.	
1MHz TO 30MHz	: 18dB MIN.
60MHz TO 80MHz	: 12dB MIN.
NOTE: 100 OHMS CONNECTED TO (J2-J1) OR (J3-J6).	
7.0 DIELECTRIC WITHSTAND:(J1, J2) TO (P1, P3)	: 1500 Vrms
(J3, J6) TO (P4, P6)	: 1500 Vrms
8.0 INSERTION LOSS: RS=RL=100 ohms	
100KHz TO 100MHz	: 1.1 dB TYP
9.0 RISE TIME: RS=100 OHMS AND RL = 100 OHMS	
OUTPUT VOLTAGE = 1 V peak	: 3.0 nS MAX
PULSE WIDTH= 112nS	: 3.0 nS MAX
10.0 CROSS TALK:1-100 MHz	: 40 dB TYP
11.0 COMMON TO COMMON MODE ATTENUATION:30MHz TO 100MHz: 35dB TYP	



NOTES: 1.0 UNUSED PIN P7 IS OMITTED.

ORIGINATED BY  
CHOW WANCHUNG  
DATE 2018-01-31

DRAWN BY  
XIE YIMING  
DATE 2018-01-31

## TITLE

10/100BT MagJack®  
TAB UP, SHIELDED

## PART NO. / DRAWING NO.

SI-50154-F

## FILE NAME

SI-50154-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



**bel** MAGNETIC  
SOLUTIONS  
a bel group

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## NOTES:

## 1. CONNECTOR MATERIALS:

HOUSING: THERMOPLASTIC UL94 V-0

CONTACT/SHIELD: COPPER ALLOY

SHIELD PLATING: NICKEL OR TIN

CONTACT PLATING: 50 MICRO-INCH SELECTIVE HARD GOLD PLATING  
OR EQUIVALENT IN CONTACT AREA

## 2. PIN NOT ELECTRICALLY CONNECTED MAYBE OMITTED.

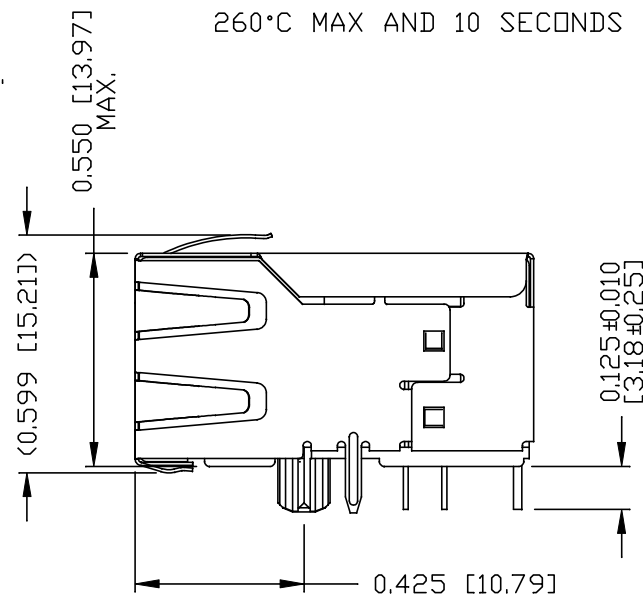
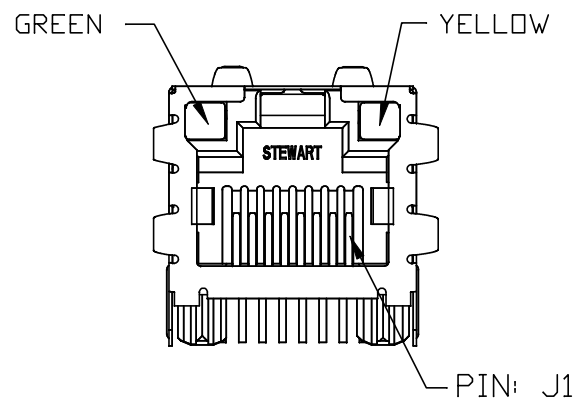
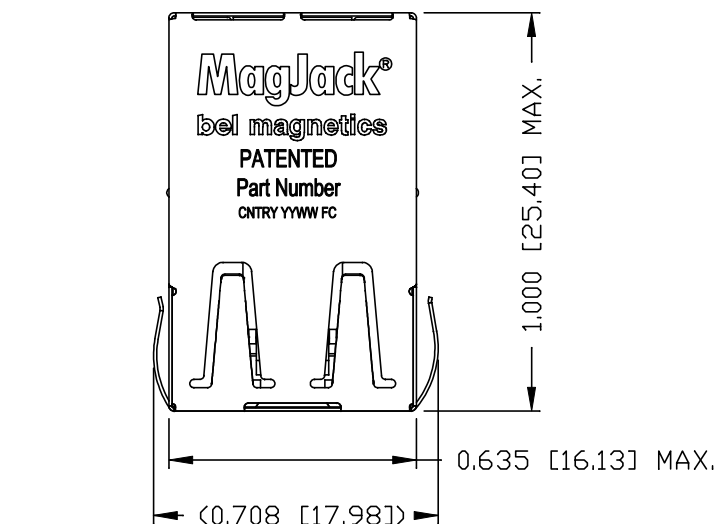
SEE ELECTRICAL DRAWING FOR OMITTED PINS.

## 3. TOLERANCES COMPLY WITH TIA-1096 DIMENSION REQUIREMENTS.

4. ALL TOLERANCES NOT OTHERWISE SPECIFIED TO BE  $\pm 0.005$  [0.13]

## 5. THE PRODUCT IS RoHS COMPLIANT.

## 6. THE PART IS RECOMMENDED FOR WAVE SOLDERING.

THE SUGGESTED PEAK WAVE SOLDERING CONDITION IS  
260°C MAX AND 10 SECONDS MAX.

ORIGINATED BY  
ANTON LIAO  
DATE 2018-01-31

DRAWN BY  
LIU DONGJUN  
DATE 2018-01-31

TITLE  
10/100BT MagJack®  
TAB UP, SHIELDED

PART NO. / DRAWING NO.  
SI-50154-F

FILE NAME  
SI-50154-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 : 3

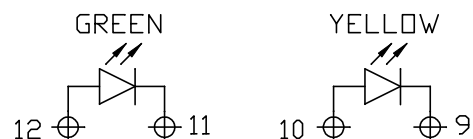


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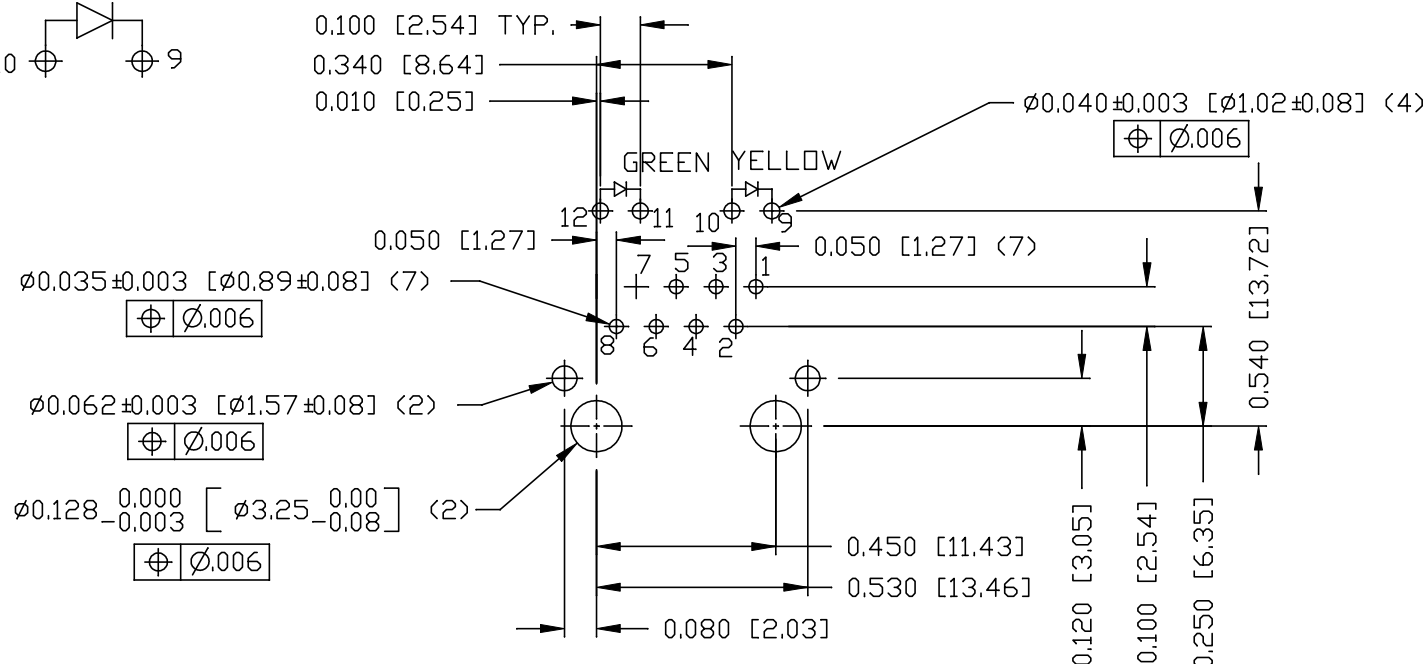


## LED POLARITY



LED SPECIFICATION			
STANDARD LED	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)



P.C.B. RECOMMENDED HOLE LAYOUT  
SEEN FROM COMPONENT SIDE

ALL CENTERLINE DIMENSIONS ARE BASIC

ORIGINATED BY  
ANTON LIAO  
DATE 2018-01-31

DRAWN BY  
LIU DONGJUN  
DATE 2018-01-31

TITLE  
10/100BT MagJack®  
TAB UP, SHIELDED

PART NO. / DRAWING NO.  
SI-50154-F

FILE NAME  
SI-50154-F\_B.DWG

STANDARD DIM.  
TOL. IN INCH

.X  
.XX  
.XXX

[ ] METRIC DIM.  
AS REF.

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

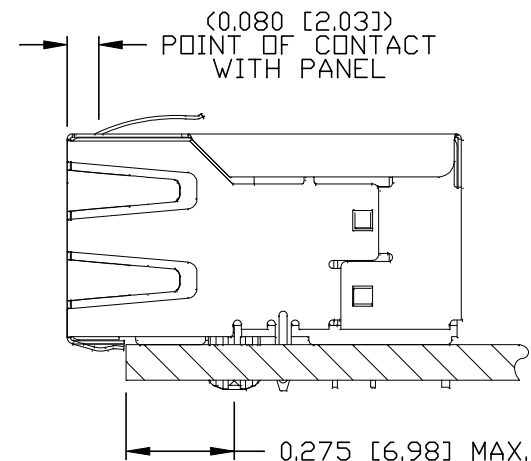
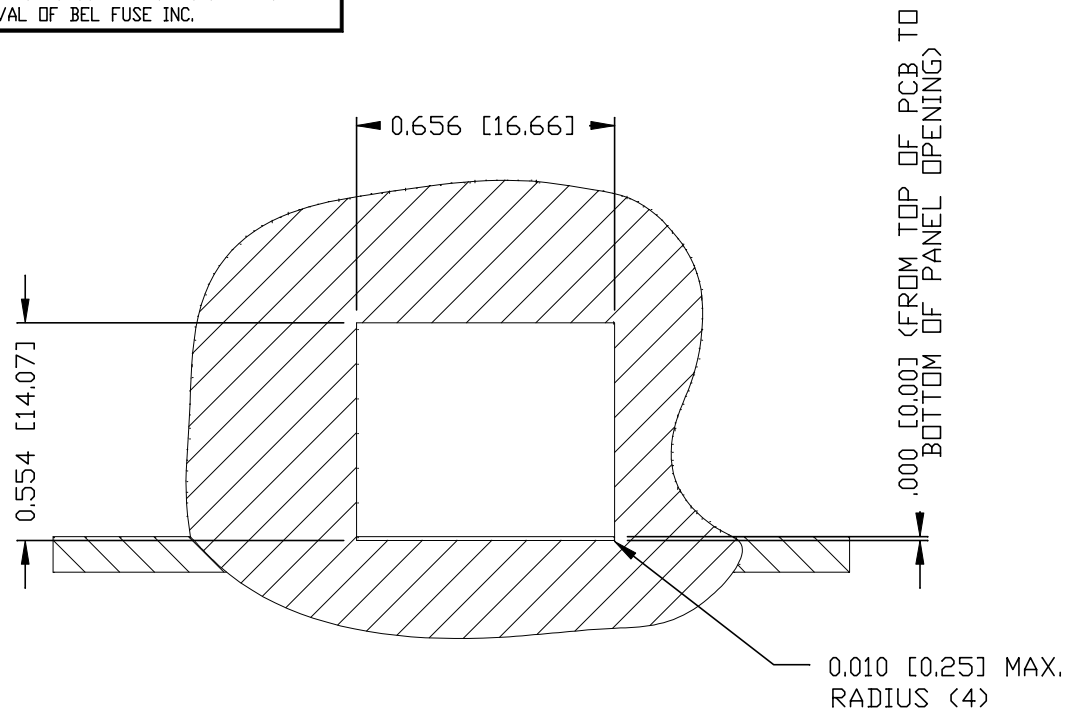
REV. : B

PAGE : 4



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SUGGESTED PANEL OPENING

## NOTES:

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

ORIGINATED BY ANTON LIAO DATE 2018-01-31		PART NO. / DRAWING NO. SI-50154-F		STANDARD DIM. TOL. IN INCH		[ ] METRIC DIM. AS REF.		REV. : B	PAGE : 5
DRAWN BY LIU DONGJUN DATE 2018-01-31		FILE NAME SI-50154-F_B.DWG		.X		UNIT : INCH [mm]		 a bel group	
				.XX		SCALE : N/A			
				.XXX	±0.005		SIZE : A4		