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RoHS

POWER | PROTECT | CONNECT

DOCUMENT / PART NO.: SI-60159-F

TITLE : 10/100BT ,TAB DOWN, SHIELDED

ISSUE	DESCRIPTION OF CHANGE	REVIEWED BY	APPROVED BY	ECN#
	Previous revisions kept in GR			
A0	Change to Bel format and add a cover sheet(GR ECO#06260:Use new format and production release)	Bain Liu	Danny Kwan (DEC.19,2008)	
A1	Update to newest format, added shield PIN Length and tolerance.(GR ECO#06337)	Bain Liu	Danny Kwan (Jul.16,2010)	RD4100102
A2	The product is patent, change the drawing to patent format.(GR ECO#06352)	Bain Liu	Danny Kwan (Aug,06,2010)	RD4100117
A3	CORRECT THE LED PIN HOLE DIMENSION & ADD UL LOGO INFORMATION	ANTON LIAO	Leung, Wai-shun 2018.10.17 17:43:38 +08'00'	RD2180114

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REV.	A3	A3	A3	A3	A3	A3												
PAGE																		
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Please read our datasheet & drawing disclaimer here.

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POWER | PROTECT | CONNECT

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Product Specification No.
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By Sandy Date 2018/10/11

DOCUMENT / PART NO.: SI-60159-F

TITLE : 10/100BT ,TAB DOWN, SHIELDED

ISSUE	DESCRIPTION OF CHANGE	REVIEWED BY	APPROVED BY	ECN#
A0	USE NEW FORMAT AND PRODUCTION RELEASE.	BAIN LIU	DANNY KWAN	06260
A1	UPDATE TO NEW FORMAT, ADD SHIELD PIN LENGTH.	STEVE WELLER	STEVE WELLER	06337
A2	THE PRODUCT IS PATENT , CHANGE THE DRAWING TO PATENT FORMAT.	Bain Liu	Steve Weller	06352
A3	CORRECT THE LED PIN HOLE DIMENSION & ADD UL LOGO INFORMATION	ANTON LIAO		

PAGE	1	2	3	4	5	6												
REV.	A3	A3	A3	A3	A3	A3												
PAGE															C0148-F REV A1			
REV.															24-0343-F REV A2			

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ELECTRICAL CHARACTERISTICS @ 25°C

1.0 TURNS RATIO: (P3–P5–P6) : (J3–J6) : 1CT : 1CT ± 3%
(P1–P4–P2) : (J1–J2) : 1CT : 1CT ± 3%

2.0 INDUCTANCE: (P1–P2) : 350uH MIN. @ 0.1V, 100KHz, 8mA DC Bias
(P3–P6) : 350uH MIN. @ 0.1V, 100KHz, 8mA DC Bias

3.0 LEAKAGE INDUCTANCE: P6–P3 (WITH J6 AND J3 SHORT) : 0.3 MAX. @ 1MHz
P2–P1 (WITH J2 AND J1 SHORT) : 0.3 MAX. @ 1MHz

4.0 INTERWINDING CAPACITANCE: (P6,P5,P3) TO (J6,J3) : 30pf MAX @ 1MHz
(P2,P4,P1) TO (J2,J1) : 30pf MAX. @ 1MHZ

5.0 DC RESISTANCE: (J6–J3)=(J2–J1) : 1.2 ohms Max.

6.0 RETURN LOSS: (P6–P4)=100 OHMS AND (P1–P2)=100 OHM REF.
1MHz TO 30MHz : 18dB MIN.
60MHz TO 80MHz : 12dB MIN.

NOTE: 100 OHMS CONNECTED TO (J2–J1) OR (J6–J3).

7.0 DIELECTRIC WITHSTAND: (J1, J2) TO (P1, P2) : 1500 Vrms
(J3, J6) TO (P3, P6) : 1500 Vrms

8.0 INSERTION LOSS: RS=RL=100 ohms
100KHz TO 100MHz : 1.1 dB TYP

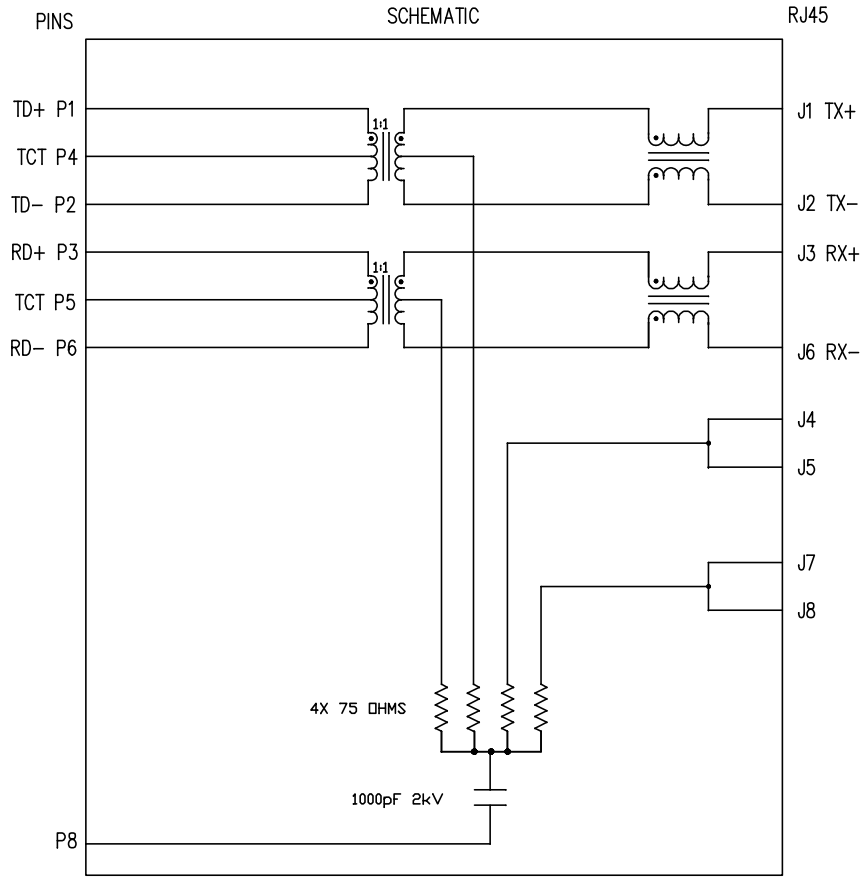
9.0 RISE TIME: RS=100 OHMS AND RL = 100 OHMS
OUTPUT VOLTAGE = 1 V peak : 3.0 nS MAX
PULSE WIDTH= 112nS : 3.0 nS MAX

10.0 CROSS TALK: 1MHz TO 100MHz : 40 dB TYP

11.0 COMMON TO COMMON MODE ATTENUATION: 30MHz TO 100MHz : 35dB TYP

12.0 OPERATING TEMPERATURE : 0°C TO 70°C

SCHEMATIC



NOTES

1.0 PINS WITHOUT ELECTRICAL CONNECTION ARE OMITTED.

REV. : A3 | PAGE : 2

ORIGINATED BY: CHOW WANCHUNG DATE: 2018-10-04	TITLE: 10/100BT MagJack® TAB DOWN, SHIELDED	PART NO. / DRAWING NO.: SI-60159-F FILE NAME: SI-60159-F_A3.DWG	STANDARD DIM. TOL. IN INCH .X .XX .XXX
DRAWN BY: XIE YIMING DATE: 2018-10-04			[ ] METRIC DIM. AS REF. UNIT : INCH [mm] SCALE : N/A SIZE : A4

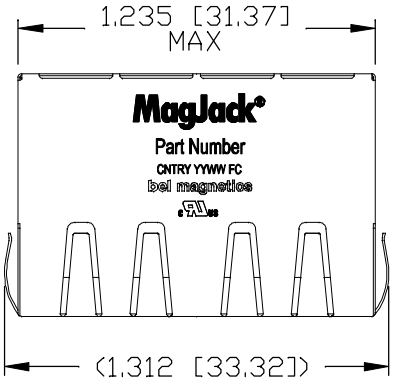
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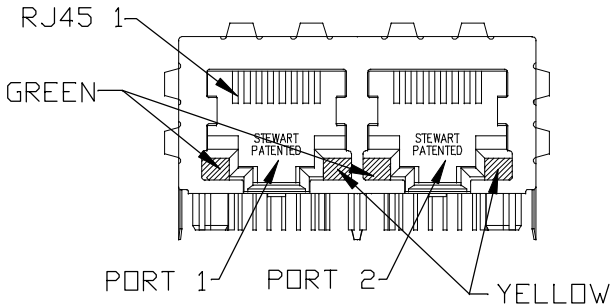
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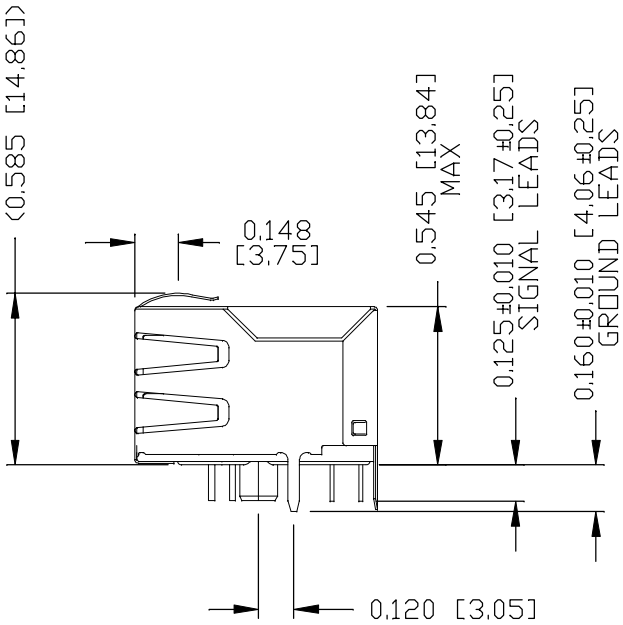
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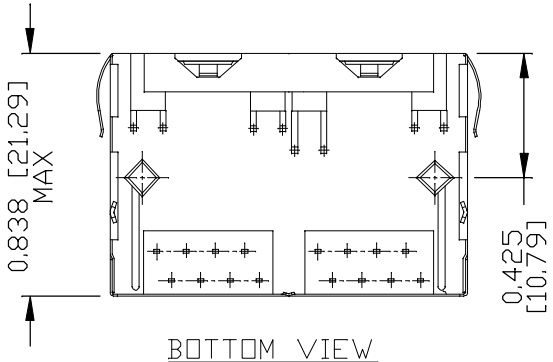
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BOTTOM VIEW

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.
   c UL us UL RECOGNIZED - FILE #E474585.
5. THE PART IS RECOMMENDED FOR WAVE SOLDERING. THE SUGGESTED PEAK WAVE SOLDERING CONDITION IS 260°C MAX. AND 10 SECONDS MAX.

REV. : A3	PAGE : 3

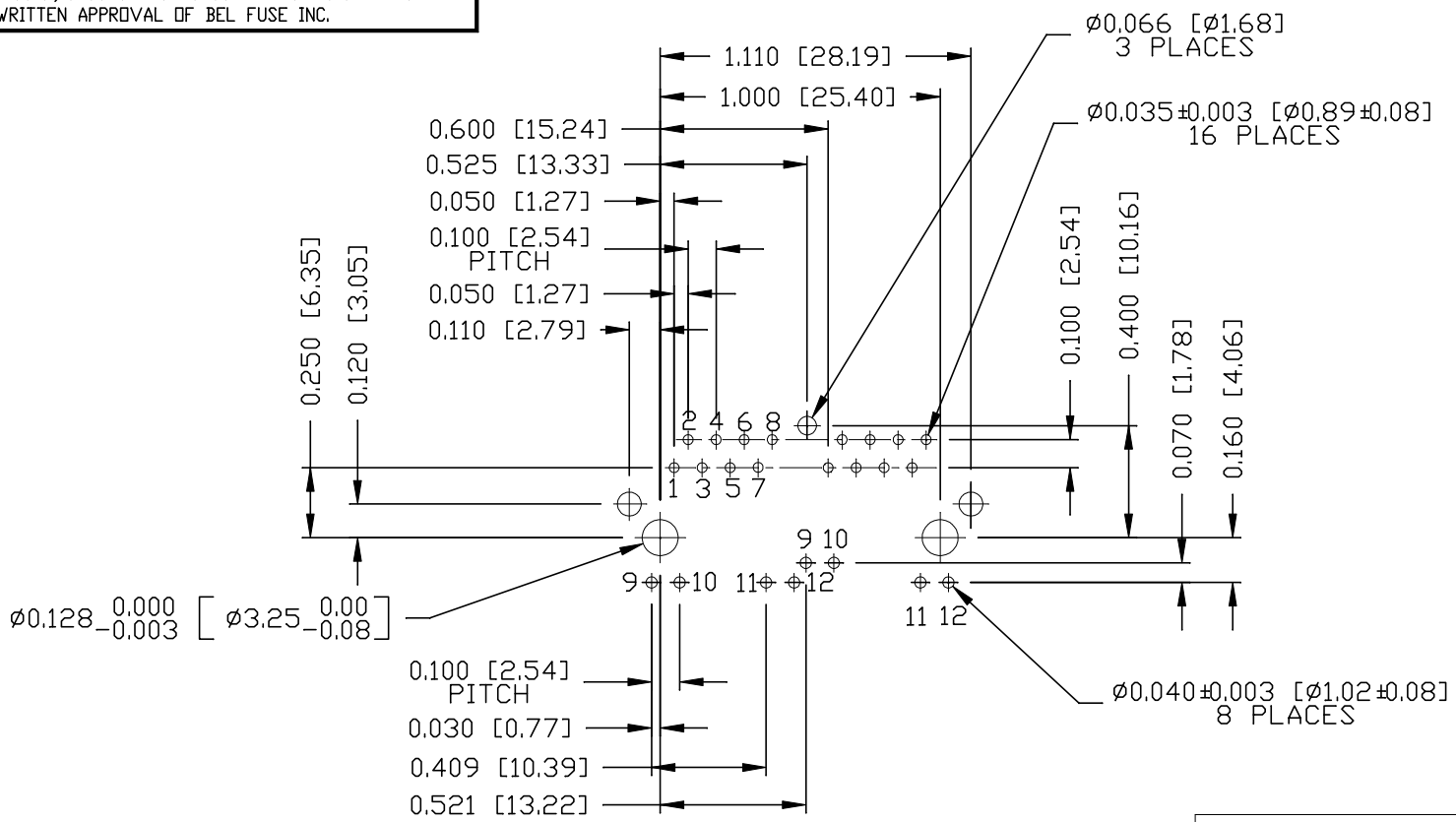
ORIGINATED BY ANTON LIAO DATE 2018-10-04	TITLE 10/100BT MagJack® TAB DOWN, SHIELDED	PART NO. / DRAWING NO. SI-60159-F	STANDARD DIM. TOL. IN INCH	[ ] METRIC DIM. AS REF.	bel MAGNETIC SOLUTIONS a bel group
DRAWN BY SANDY LIN DATE 2018-10-04		FILE NAME SI-60159-F_A3.DWG	.X .XX .XXX ±0.005	UNIT : INCH [mm] SCALE : N/A SIZE : A4	

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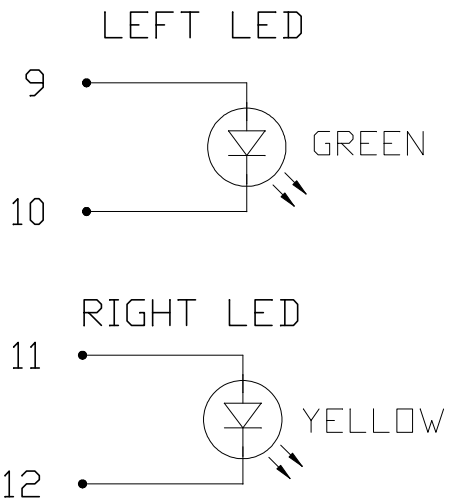
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PCB RECOMMENDED HOLE LAYOUT
SEEN FROM COMPONENT SIDE
ALL CENTERLINE DIMENSIONS ARE BASIC.



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)

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ORIGINATED BY: ANTON LIAO DATE: 2018-10-04	TITLE: 10/100BT MagJack® TAB DOWN, SHIELDED	PART NO. / DRAWING NO.: SI-60159-F FILE NAME: SI-60159-F_A3.DWG	STANDARD DIM. TOL. IN INCH: .X, .XX, .XXX ±0.005 [ ] METRIC DIM. AS REF. UNIT : INCH [mm] SCALE : N/A SIZE : A4
DRAWN BY: SANDY LIN DATE: 2018-10-04			

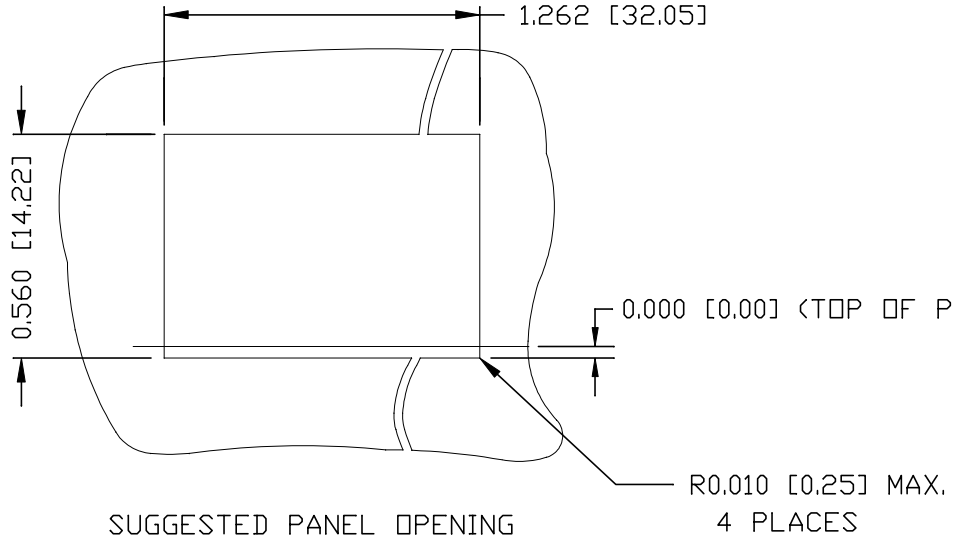
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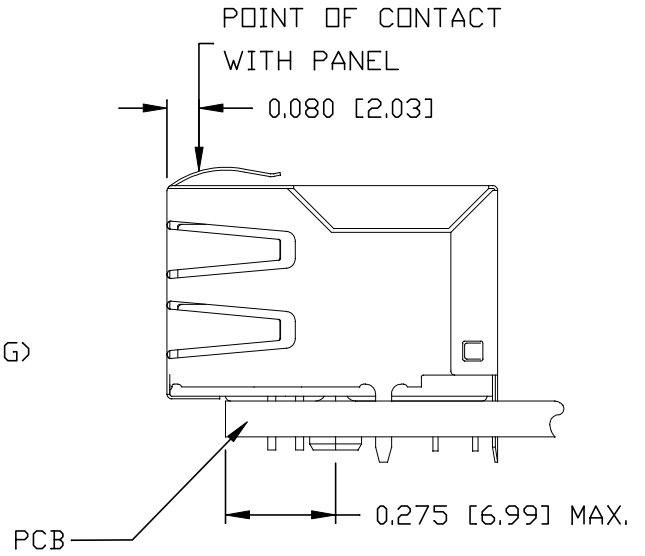
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SUGGESTED PANEL OPENING



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.

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REV. : A3 | PAGE : 5

ORIGINATED BY ANTON LIAO DATE 2018-10-04	TITLE 10/100BT MagJack® TAB DOWN, SHIELDED	PART NO. / DRAWING NO. SI-60159-F	STANDARD DIM. TOL. IN INCH	[ ] METRIC DIM. AS REF.	bel MAGNETIC SOLUTIONS a bel group
DRAWN BY SANDY LIN DATE 2018-10-04		FILE NAME SI-60159-F_A3.DWG	.X .XX .XXX ±0.005	UNIT : INCH [mm] SCALE : N/A SIZE : A4	

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