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ELECTRICAL CHARACTERISTICS @ 25°C

- 1.0 TURNS RATIO: (P1-P3); (J1-J2)
(P4-P5); (J3-J6)
1CT : 1CT 42%
1CT : 1CT 42%
- 2.0 DC RESISTANCE: (P1-P3); (P4-P5)
(J1-J2); (J3-J6)
1.4 OHMS
1.2 OHMS
- 3.0 INDUCTANCE: (P1-P3)
(P4-P5)
350uH MIN. @ 0.1V, 100KHz, 8mA DC BIAS
350uH MIN. @ 0.1V, 100KHz, 8mA DC BIAS
- 4.0 LEAKAGE INDUCTANCE: (P4-P5) WITH J6 AND J3 SHORT
(P1-P3) WITH J2 AND J1 SHORT
0.3uH MAX. @ 1MHz
0.3uH MAX. @ 1MHz
- 5.0 INTERWINDING CAPACITANCE: (P4,P5) TO (J3,J6)
(P1,P2,P3) TO (J1,J2)
60pF TYP @ 1MHz
60pF TYP @ 1MHz
- 6.0 RETURN LOSS: (P1-P3)=100 OHMS REF. AND (P4-P5)=100 OHM REF.
1MHz TO 30MHz -18dB MIN.
30MHz TO 60MHz -(19-20LOG(f/30MHz))
60MHz TO 80MHz 12dB MIN.
- 7.0 DIELECTRIC WITHSTAND: (J3,J6) TO (P4,P5)
(J1,J2) TO (P1,P3)
1500Vms
1500Vrms
- 8.0 INSERTION LOSS: RS=RL=100 OHMS
1MHz-65MHz -1dB MAX
- 9.0 RISE TIME: RS=RL=100 OHMS
OUTPUT VOLTAGE = 1V PEAK
PULSE WIDTH = 112ns 3.0ns MAX
3.0ns MAX
- 10.0 CROSS TALK: 1MHz-65MHz -35dB MIN.
- 11.0 CM TO CM ATTENUATION: 30MHz TO 100MHz -30dB MIN.
100MHz TO 130MHz -20dB MIN.
- 12.0 BALANCED DC LINE CURRENT: 350mA MAX. CONTINUOUS
500mA MAX. FOR 200 MILLISECONDS
- 13.0 OPERATING TEMPERATURE: 0°C to +70°C

Please read our datasheet & drawing disclaimer [here](#).

ORIGINATED BY
CHOW WANCHUNG
DATE 2022-04-20

DRAWN BY
TANG YUAN
DATE 2022-04-20

TITLE
MagJack®
10/100 BT, PoE
TAB UP, SHIELDED
PATENTED

PART NO. / DRAWING NO.
SI-52008-F
FILE NAME
SI-52008-F_C.DWG

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

PC002(2)120214

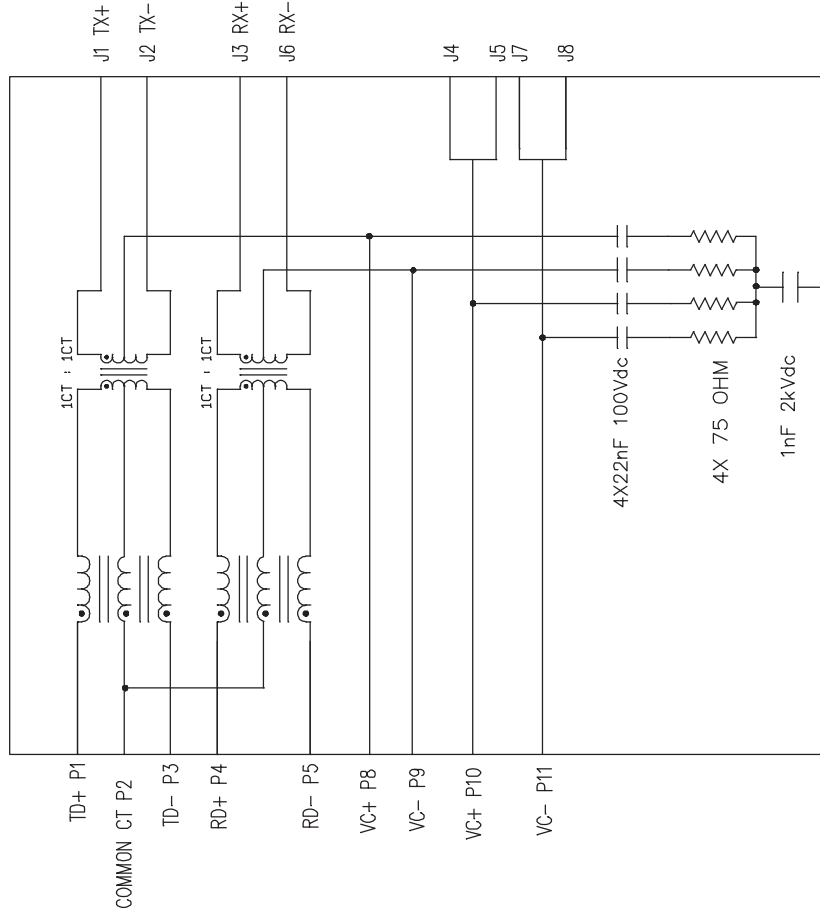
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RJ45

SCHEMATIC

PINS



NOTES

1.0 DESIGNED TO SUPPORT IEEE 802.3

REV. : C PAGE : 2



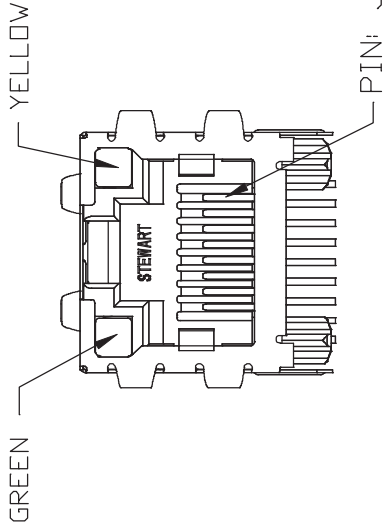
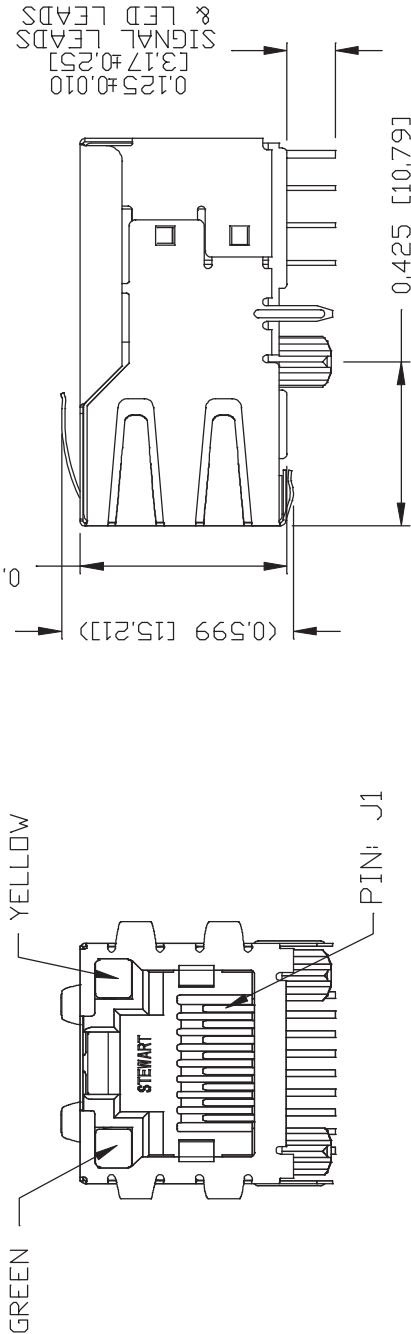
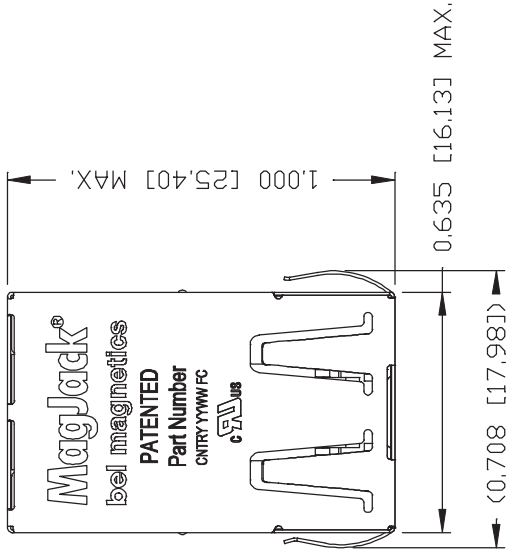
MAGNETIC
SOLUTIONS
a bel group

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RoHS

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 TIA-1096 DIMENSION REQUIREMENTS,
4. THE PRODUCT IS RoHS COMPLIANT.
CAUTION **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.
6. THE PRODUCT IS PATENTED, THE PATENT NUMBER IS U.S. PAT. 7,123,117,



ORIGINATED BY
ANTON LIAO
DATE 2022-04-20
DRAWN BY
SANDY LIN
DATE 2022-04-20

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10/100 BT, PoE
TAB UP, SHIELDED
PATENTED

PART NO. / DRAWING NO.

SI-52008-F

FILE NAME

SI-52008-F_C.DWG

STANDARD DIM.
TOL. IN INCH

.X
.XX
.XXX

[] METRIC DIM.
AS REF.

UNIT : INCH [mm]

SCALE : N/A

SIZE : A4

REV. : C PAGE : 3

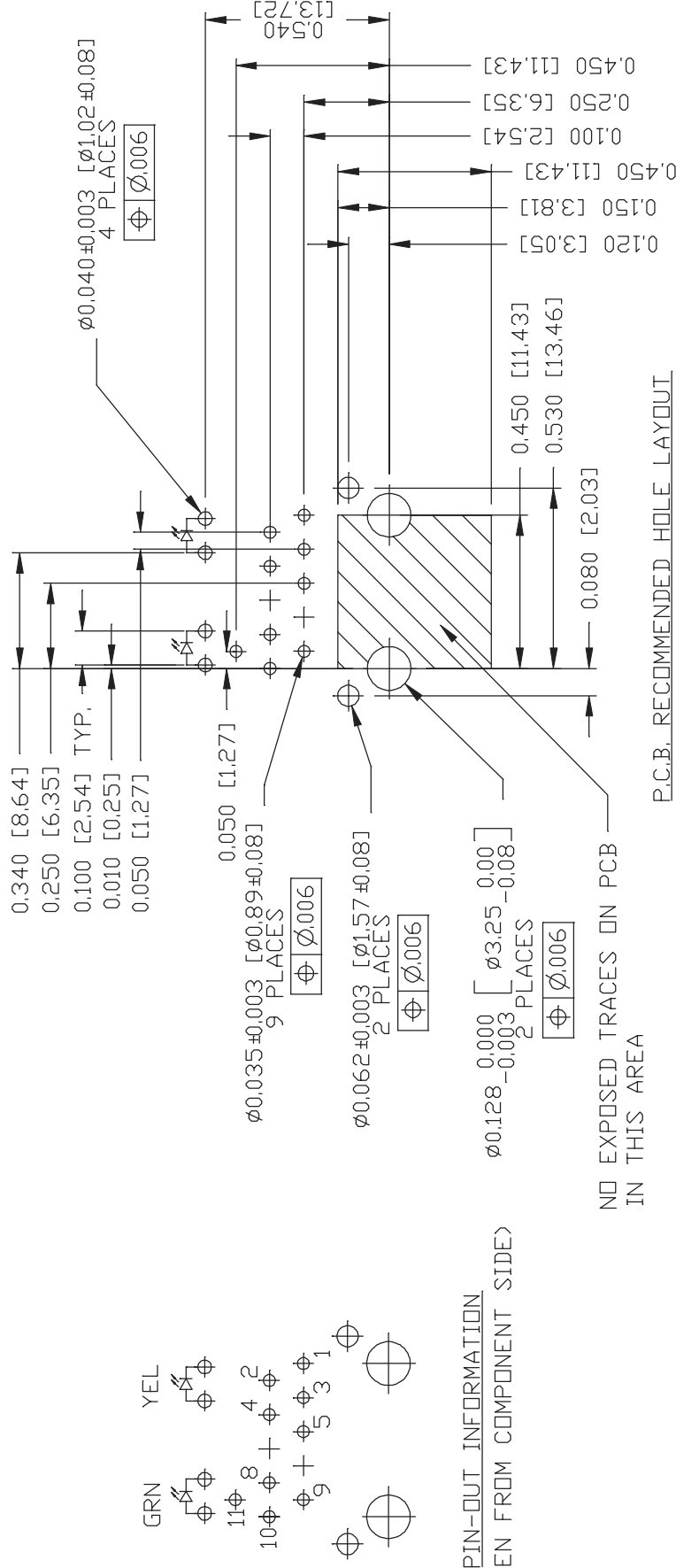


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LED SPECIFICATION				
STANDARD	LED	WAVELENGTH	FORWARD V	*(TYP)
	GREEN	570 nm	2.5 V	2.2 V
	YELLOW	590 nm	2.5 V	2.1 V

*WITH A FORWARD CURRENT OF 20 mA (TYP)



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

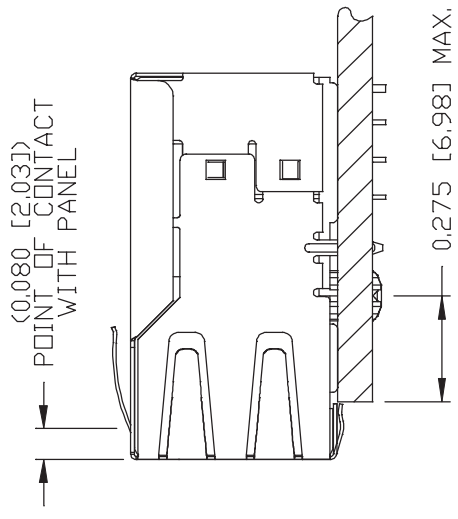
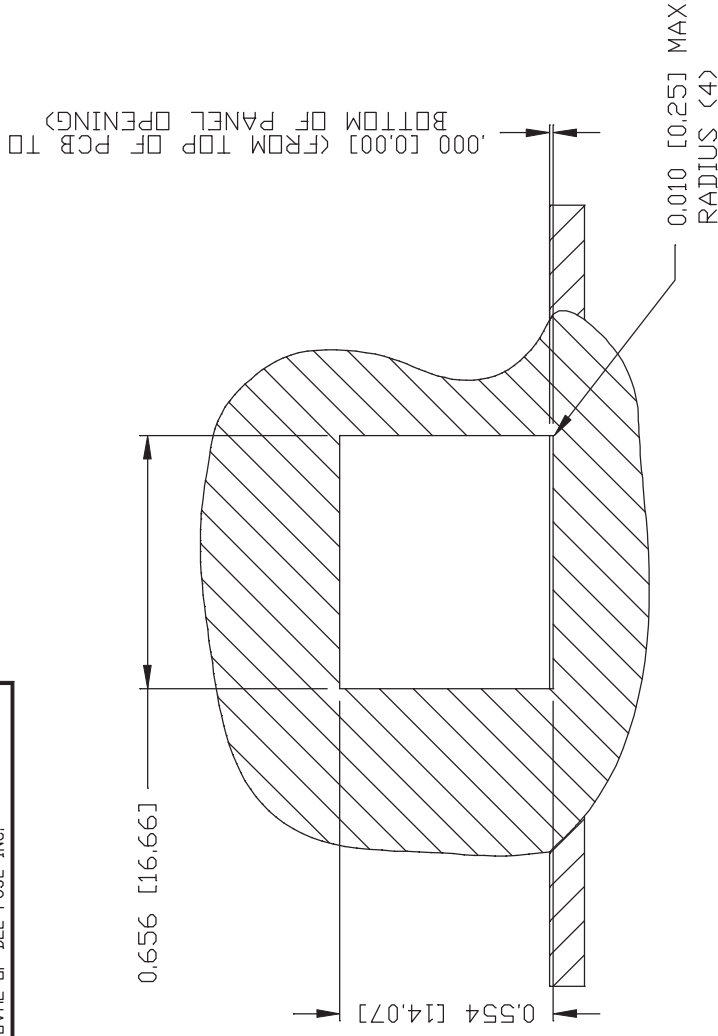
ALL CENTERLINE DIMENSIONS ARE BASIC

ORIGINATED BY ANTON LIAO		TITLE MagJack® 10/100 BT, PoE TAB UP, SHIELDED PATENTED		PART NO. / DRAWING NO. SI-52008-F		STANDARD DIM. TOL. IN INCH		[] METRIC DIM. AS REF.		REV. : C PAGE : 4	
DATE 2022-04-20				FILE NAME SI-52008-F_C.DWG		.X		UNIT : INCH [mm]			
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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.

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