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# PRFLIMINARY

**SCHEMATIC** 



RJ45

J1 TX+

J2 TX-

J3 RX+

J6 RX-

J4

J5

### ELECTRICAL CHARACTERISTICS @ 25°C

ELECTRICAL SPECIFICATIONS:

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

2.0 INDUCTANCE: (J3-J6) (P3-P1) : 350uH MIN. @ 0.1V, 100KHz, 8mA DC Bias : 350uH MIN. @ 0.1V, 100KHz, 8mA DC Bias

3.0 LEAKAGE INDUCTANCE:P6-P5-P4 (WITH J6 AND J3 SHORT): 0.3 MAX. @ 1MHz P3-P2-P1 (WITH J2 AND J1 SHORT): 0.3 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) : 1.2 ohms Max.

RECEIVE

: 1.1 dB TYP

6.0 RETURN LOSS:(J3-J6)=100 OHMS AND (P1-P3)=100 OHM REF.

1MHz TO 30MHz : 18dB MIN. 30MHz TO 80MHz : 12dB MIN.

NOTE: 100 OHMS CONNECTED TO (J2-J1) OR (P6-P4).

7.0 DIELECTRIC WITHSTAND: (J1, J2) TO (P1, P3) (J3, J6) TO (P4,P6) : 1500 Vrms : 1500 Vrms

8.0 INSERTION LOSSRS=RL=100 ohms

100KHz TO 100MHz

9.0 RISE TIME: RS=100 OHMS AND RL = 100 OHMS

OUTPUT VOLTAGE = 1 V peak

: 3.0 nS MAX : 3.0 nS MAX PULSE WIDTH= 112nS

10.0 CROSS TALK: 1-100 MHz : 30 dB TYP

11.0 COMMON TO COMMON MODE ATTENUATION HZ TO 100MHZ : 35dB TYP

J7 J8 4X 75 OHMS 1000pF 2kV CHASSIS GND P8

#### NOTES

PINS

TD+ P1

TCT P2

TD- P3

RD+ P4

RD- P6

RCT P5

1.1.1.

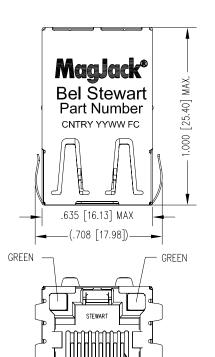
1.0 PINS WITHOUT ELECTRICAL CONNECTION ARE OMITTED.

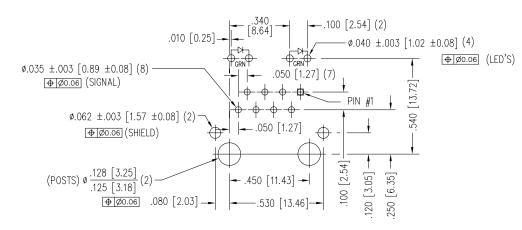
ORIGINATED BY Bain Liu	<b>DATE</b> 09-19-08	Maglack®	PART NO. / DRAWING NO. SI-50237-F		ARD DIM. IN INCH	[ ] METRIC DIM. AS UNIT: INCH [mm]		bel
DRAWN BY LW Yuan	<b>DATE</b> 09-19-08	10/100BT TAB UP, SHIELDED	FILE NAME SI-50237-F.DWG	.X .XX .XXX	±0.005	SCALE : N/A	SIZE : A4 PAGE : 2	COMPONENTS FOR A COMMECTED PLANET

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## PRELIMINARY





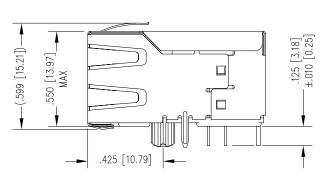


P.C.B. RECOMMENDED HOLE LAYOUT SEEN FROM COMPONENT SIDE

ALL CENTERLINE DIMENSIONS ARE BASIC.

#### 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. ALL TOLERANCES NOT OTHERWISE SPECIFIED TO BE ±.005 [0.13]
- REFLOW AND WAVE SOLDER COMPATIBLE -260°C FOR 10 SECONDS MAX.



LED SPECIFICATION				
STANDARD LED	WAVELENGTH	Forward V (MAX)	* (TYP)	
GREEN	565 nm	2.5 V	2.2 V	

\*WITH A FORWARD CURRENT OF 20 mA (TYP)

ORIGINATED BY	DATE
Bain Liu	09-19-08
DRAWN BY	DATE

Maglack®
10/100BT
TAB UP, SHIELDED

PIN: J1

TITLE

PART NO. / DRAWING NO.

SI-50237-F

FILE NAME

SI-50237-F.DWG

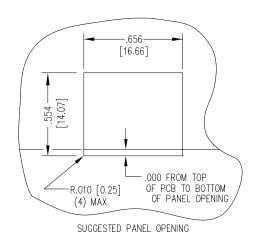
STANDA	RD DIM.	[ ] METRIC DIM. AS	REFERE	NCE
TOL. IN INCH		UNIT : INCH [mm]	REV. :	X1
.X		<u> </u>	SIZE :	
.XX		SCALE: N/A	SIZE :	A4
.XXX	±0.005		PAGE :	3

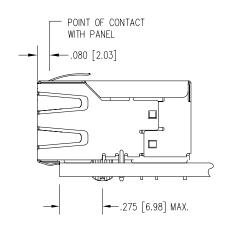


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PRELIMINARY







- 1. THE SUGGESTED PANEL OPENING IS INTENDED
  TO GIVE THE USER THE ABILITY TO HAVE
  REASONABLE JACK / PANEL CLEARANCES
  YET MAINTAIN RELIABLE GROUNDING
  CAPABILITY.
- 2. ALL TOLERANCES NOT OTHERWISE SPECIFIED TO BE ±.005 [0.13]

ORIGINATED BY	DATE
Bain Liu	09-19-08
DRAWN BY	DATE

MagJack®
10/100BT
TAB UP, SHIELDED

TITLE

PART NO. / DRAWING NO.	
SI-50237-F	
FILE NAME	
SI-50237-F.DWG	

STANDARD DIM.		[ ] METRIC DIM. AS	REFERENCE
TOL. IN INCH		UNIT : INCH [mm]	<b>REV.</b> : X1
X XX		SCALE : N/A	SIZE : A4
AA XXX	+0.005		PAGE: 4

