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RJ45

J1 TX+

J2 TX-

J3 RX+

J6 RX-

## **ELECTRICAL CHARACTERISTICS @ 25°C**

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

2.0 INDUCTANCE: (P6-P4) (P3-P1) : 350uH MIN. @ 0.1V, 100KHz, 8mA DC Bias : 350uH MIN. @ 0.1V, 100KHz, 8mA DC Bias

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

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

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

RECEIVE

6.0 RETURN LOSS: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, P3) (J3, J6) TO (P4,P6) : 1500 Vrms : 1500 Vrms

8.0 INSERTION LOSS: RS=RL=100 ohms

100KHz TO 100MHz

TITLE

: 1.1 dB TYP

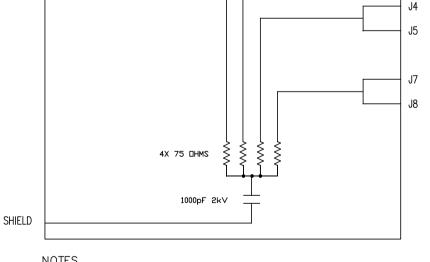
9.0 RISE TIME: RS=100 OHMS AND RL = 100 OHMS

OUTPUT VOLTAGE = 1 V peak : 3.0 nS MAX PULSE WIDTH= 112nS : 3.0 nS MAX

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

11.0COMMON TO COMMON MODE ATTENUATION:

30MHz TO 100MHz: 35dB TYP



SCHEMATIC

## **NOTES**

PINS

TD+ P1

TCT P2

TD- P3

RD+ P4

TCT P5

RD- P6

1.0 PINS WITHOUT ELECTRICAL CONNECTION ARE OMITTED.

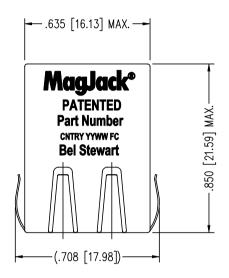
ORIGINATED BY	DATE
ZL WANG	11-03-09
DRAWN BY	DATE
RS ZHANG	11-03-09

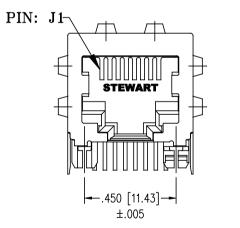
**MagJack<sup>®</sup>** 10/100BT **TAB DOWN, SHIELDED PATENTED** 

PART NO. / DRAWING NO.	STANDA	ARD DIM.	[] METRIC DIM. AS REFERENCE		
SI-60097-F	TOL. IN	INCH	UNIT : INCH [mm]	REV.: X1	
FILE NAME			SCALE: N/A	SIZE: A4	
SI-60097-F.DWG	_XX	10.005		PAGE: 2	
	XXX.	±0.005		FAGE. Z	

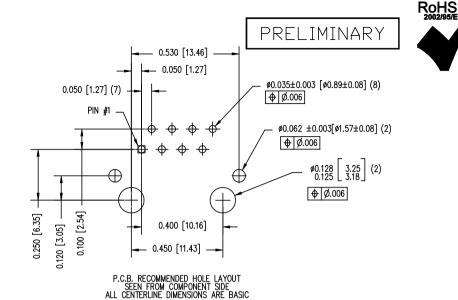


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TITLE



-.148 [3.75]
HIGHEST POINT
OF BEAM

-.083 [2.12]
HIGHEST POINT
OF BEAM
-.425 [10.79]
±.005

## 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.

- 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]
- 5. WAVE SOLDER COMPATIBLE PREHEAT 125°C/90SECS.

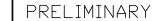
ORIGINATED BY	DATE
ZL WANG	11-03-09
DRAWN BY	DATE
RS ZHANG	11-03-09

MagJack®
10/100BT
TAB DOWN, SHIELDED
PATENTED

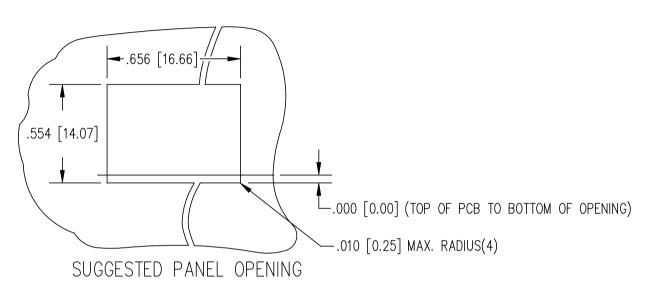
PART NO. / DRAWING NO.	STANDARD DIM.		[] METRIC DIM. AS REFERENCE		İ
SI-60097-F	TOL. IN INCH		UNIT : INCH [mm]	REV.: X1	İ
FILE NAME	.X		SCALE: N/A	SIZE: A4	
SI-60097-F.DWG	.XX		SCALE: N/A	SIZE: A4	
31-00097-F.DWG	.XXX.	±0.005		PAGE: 3	

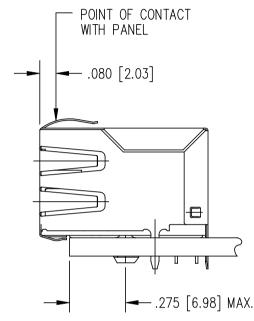


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- 1. THE SUGGESTED PANEL OPENING IS INTENDED TO GIVE THE USER THE ABILITY TO HAVE REASONABLE JACK / PANEL CLEARANCES YET MAINTAIN RELIABLE GROUNDING CAPABILITY.
- 2. ALL TOLERANCES NOT OTHERWISE SPECIFIED TO BE ±.005 [0.13]

ORIGINATED BY	DATE
ZL WANG	11-03-09
DRAWN BY	DATE
RS ZHANG	11-03-09

MagJack®
10/100BT
TAB DOWN, SHIELDED
PATENTED

TITLE

PART NO. / DRAWING NO.	STANDARD DIM.		[] METRIC
SI-60097-F	TOL. IN	INCH	UNIT : INC
FILE NAME	.X		20415
SI-60097-F.DWG	.XX		SCALE:
	XXX.	±0.005	<del>( ( ) -</del>

[] METRIC DIM. AS REFERENCE			
UNIT : INCH [mm]	REV.: X1		
SCALE: N/A	SIZE: A4		
	PAGE: 4		

