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RJ45

J1 TX+

J2 TX-

J3 RX+

J6 RX-

J4

J5

J7

J8

SCHEMATIC

 \mathbf{u}

1CT : 1CT

1CT : 1CT

4X 75 □HMS ≥

1000pF 2kV

ELECTRICAL CHARACTERISTICS @ 25°C

OPERATING TEMPERATURE RANGE: : -40°C TO +85°C

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

2.0 INDUCTANCE: (P6-P5): 350uH MIN. @ 0.1V, 100KHz, 8mA DC Bias, -40°C TO +85°C (P2-P1): 350uH MIN. @ 0.1V, 100KHz, 8mA DC Bias, -40°C TO +85°C

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

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

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

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) : 1500 Vrms (J3, J6) TO (P4,P6) : 1500 Vrms

8.0 INSERTION LOSSRS=RL=100 ohms

100KHz TO 100MHz : 1.1 dB TYP

9.0 RISE TIMERS=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

11.0 COMMON TO COMMON MODE ATTENUA BIONNIZ TO 100MHz: 35dB TYP

TITLE

NOTES: 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®
10/100BT
TAB DOWN, SHIELDED
PATENTED

PART NO. / DRAWING NO.	STANDARD DIM. TOL. IN INCH		[] METRIC DIM. AS REFERENCE		
SI-60228-F			UNIT : INCH [mm]	REV.: X1	
FILE NAME	.X		SCALE: N/A	SIZE: A4	
SI-60228-F.DWG	.XX		<u> </u>		
	.XXX.	±0.005		PAGE: 2	

PINS

TD+ P5

TCT P4

TD- P6

RD+ P1

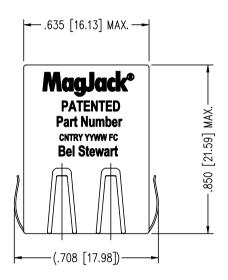
RCT P3

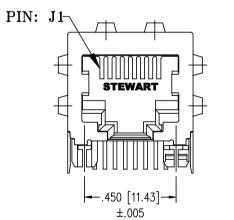
RD- P2

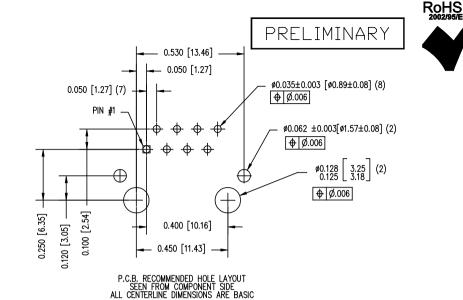
CHASSIS GROUND P8

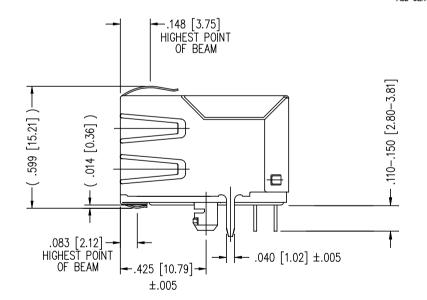


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NOTES:

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	TITLE
ZL WANG	11-03-09	
DRAWN BY	DATE	1
RS ZHANG	11-03-09	

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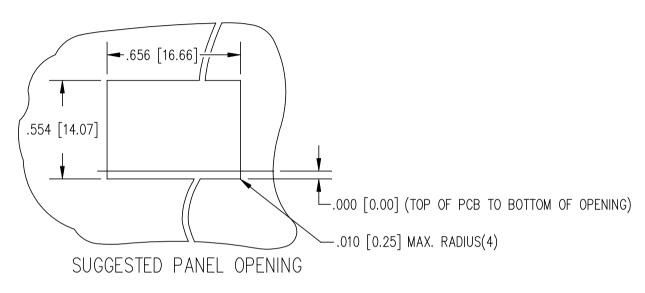
PART NO. / DRAWING NO. [1 METRIC DIM. AS REFERENCE STANDARD DIM. SI-60228-F **TOL. IN INCH** UNIT: INCH [mm] REV.: X1 X. **FILE NAME** SCALE: N/A SIZE: A4 .XX SI-60228-F.DWG PAGE: 3 .XXX ±0.005

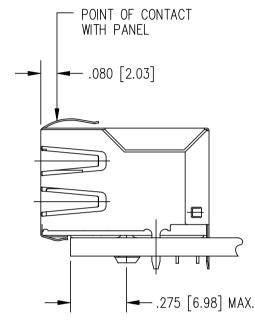


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- 1. THE SUGGESTED PANEL OPENING IS INTENDED TO GIVE THE USER THE ABILITY TO HAVE REASONABLE JACK / PANEL CLEARANCES YET MAINTAIN RELIABLE GROUNDING CAPABILITY.
- 2. ALL TOLERANCES NOT OTHERWISE SPECIFIED TO BE ±.005 [0.13]

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TITLE

	PART NO. / DRAWING NO.	TOL. IN INCH		[] METRIC DIM. AS REFERENCE	
ı	SI-60228-F			UNIT : INCH [mm]	REV.:
	FILE NAME	.X		SCALE: N/A	SIZE : A
SI-60228-F.DWG	.XX			1	
	.XXX	±0.005		PAGE:	



X1

REV.:

SIZE: A4

PAGE: 4