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PATENT 5,736,910

DOCUMENT / PART NO.: SI-46020-F

TITLE : 10/100BT, VERTICAL, SHIELDED

ISSUE	DESCRIPTION OF CHANGE								REVIEWED BY				APPROVED BY				ECN#
01	Release for sample building.								David Chan				STEVEN WELLER				06281
A0	Update circuit drawing and use new format								Bain Liu				Steve Weller				06389
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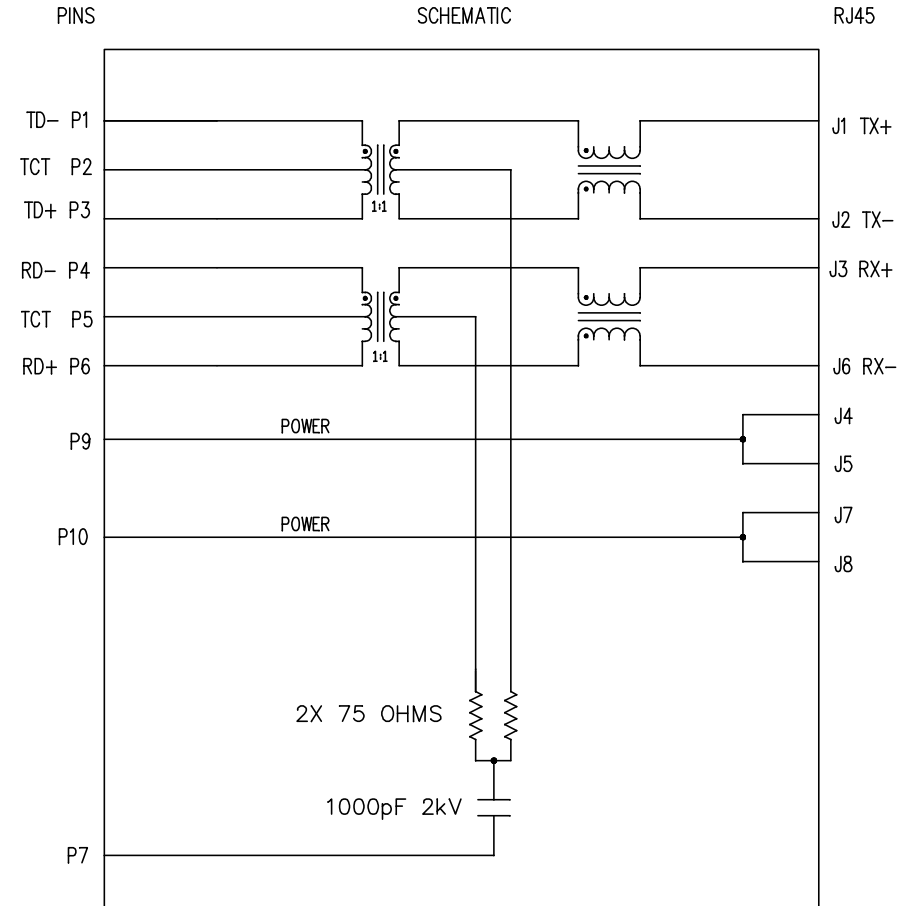
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ELECTRICAL CHARACTERISTICS @ 25°C

CURRENT CAPABILITY FOR POWER LINES:	400 mA MAX
1.0 INDUCTANCE:	
(P4-P6)	350uH MIN. @ 0.1V, 100KHz, 8mA DC BIAS
(P1-P3)	350uH MIN. @ 0.1V, 100KHz, 8mA DC BIAS
2.0 TURNS RATIO:	
(P4-P5-P6):(J3-J6)	1CT : 1CT ± 3%
(P1-P2-P3):(J1-J2)	1CT : 1CT ± 3%
3.0 LEAKAGE INDUCTANCE:	
P4-P6 (WITH J3 AND J6 SHORT)	0.3 uH MAX. @ 1MHz
P1-P3 (WITH J1 AND J2 SHORT)	0.3 uH MAX. @ 1MHz
4.0 INTERWINDING CAPACITANCE:	
(P4,P5,P6) TO (J3,J6)	30pF MAX. @ 1 MHz
(P1,P2,P3) TO (J1,J2)	30pF MAX. @ 1 MHz
5.0 DC RESISTANCE:	
(J3-J6)=(J1-J2)	1.2 OHMS MAX.
6.0 RETURN LOSS: (P4-P6)=100 OHMS AND (P1-P3)=100 OHM REF.	
1MHz TO 30MHz	-18dB MIN.
60MHz TO 80MHz	-12dB MIN.
NOTE: 100 OHMS CONNECTED TO (J1-J2) OR (J3-J6).	
7.0 DIELECTRIC WITHSTAND:	
(J1, J2) TO (P1, P3)	1500 VAC
(J3, J6) TO (P4,P6)	1500 VAC
8.0 INSERTION LOSS: RS=RL=100 ohms	
100KHz TO 100MHz	-1.1 dB
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



NOTES
1.0 PINS WITHOUT ELECTRICAL CONNECTION ARE OMITTED

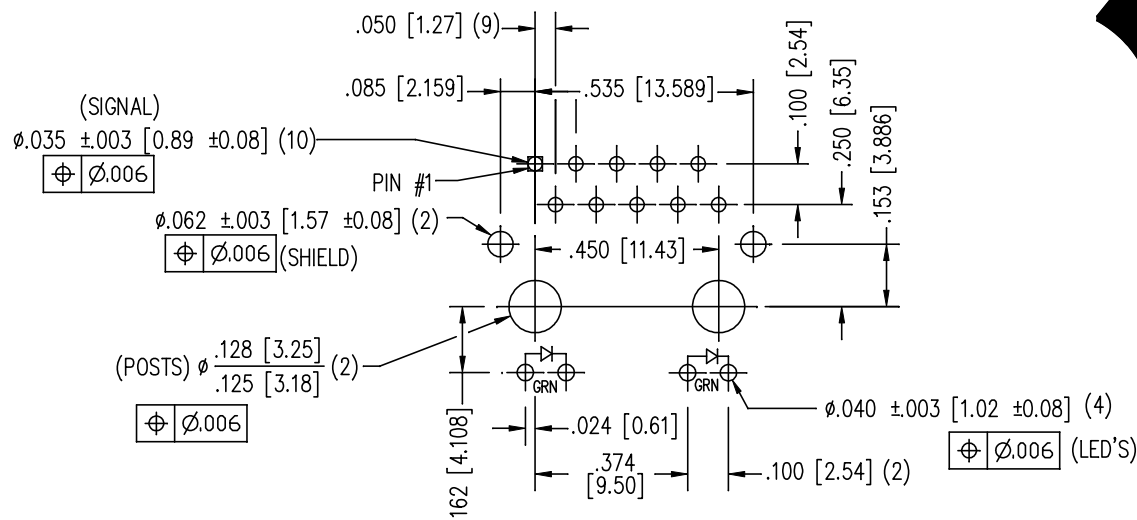
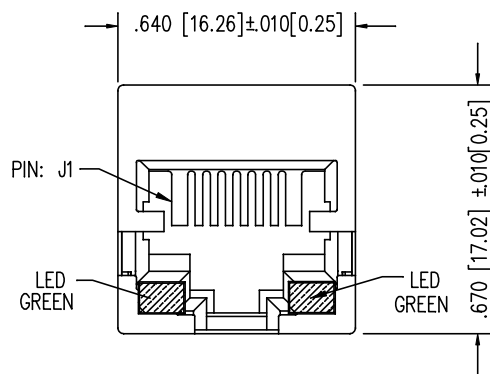
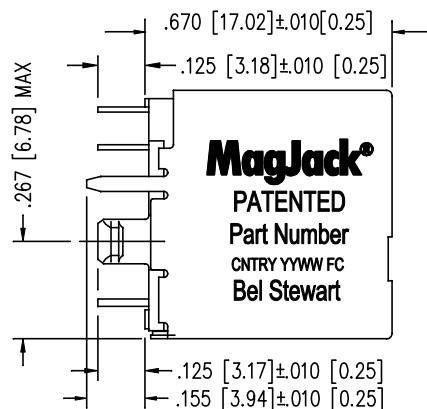
ORIGINATED BY	DATE	TITLE	PART NO. / DRAWING NO.	STANDARD DIM.	[] METRIC DIM. AS REFERENCE		 COMPONENTS FOR A CONNECTED PLANET
Bain Liu	2013-01-09	MagJack® 10/100BT VERTICAL, SHIELDED PATENTED	SI-46020-F	TOL. IN INCH	UNIT : INCH [mm]	REV. : A0	
DRAWN BY	DATE		FILE NAME	.X	SCALE : N/A	SIZE : A4	
Duan Jun	2013-01-09		SI-46020-F.DWG	.XX		PAGE : 2	
				.XXX	±0.005		

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

ALL CENTERLINE DIMENSIONS ARE BASIC.

NOTES:

- CONNECTOR MATERIALS:
HOUSING: THERMOPLASTIC UL94 V-0
CONTACT/SHIELD: COPPER ALLOY
SHIELD PLATING: NICKEL OR TIN
CONTACT PLATING: 50 MICRO-INCH SELECTIVE HARD GOLD PLATING
OR EQUIVALENT IN CONTACT AREA
- PIN NOT ELECTRICALLY CONNECTED MAYBE OMITTED.
SEE ELECTRICAL DRAWING FOR OMITTED PINS.
- TOLERANCES COMPLY WITH F.C.C. DIMENSION REQUIREMENTS.
- ALL TOLERANCES NOT OTHERWISE SPECIFIED TO BE ±0.05 [0.13]
- WAVE SOLDER COMPATIBLE - PREHEAT 125°C/90SECS.

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)

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