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PATENTED: THIS PRODUCT IS COVERED BY U.S. PATENT 5,736,910

DOCUMENT / PART NO.: SI-46020-F

TITLE: 10/100BT, VERTICAL, SHIELDED

ISSUE	DESCRIPTION OF CHANGE				REVIEWED BY			APPROVED BY			EC	N#						
01	Release for sample building.							David Chan STEVEN			VEN	WEL	LER	062	81			
	Update circuit drawing and use new format							Bain Liu			Steve Weller			063	89			
	format						+			'								
									-									
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PAGE	1	2	3	-	1								1					-
REV.	Α0	Α0	Α0															
PAGE															С	0261	REV A	\1
REV.															24-0)480-	-F REV	/ A0

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RJ45

J1 TX+

J2 TX-

J3 RX+

J6 RX-

J5

J7

J8

ELECTRICAL CHARACTERISTICS @ 25°C

CURRENT CAPABILITY FOR POWER LINES: 400 mA MAX PINS 1.0 INDUCTANCE: (P4-P6) 350uH MIN. @ 0.1V, 100KHz, 8mA DC BIAS (P1-P3) 350uH MIN. @ 0.1V, 100KHz, 8mA DC BIAS TD- P1 2.0 TURNS RATIO: TCT P2 (P4-P5-P6): (J3-J6) 1CT: 1CT ± 3% (P1-P2-P3): (J1-J2) 1CT : 1CT ± 3% TD+ P3 3.0 LEAKAGE INDUCTANCE: P4-P6 (WITH J3 AND J6 SHORT) RD- P4 0.3 uH MAX. @ 1MHz 0.3 uH MAX. @ 1MHz P1-P3 (WITH J1 AND J2 SHORT) TCT P5

4.0 INTERWINDING CAPACITANCE:

(P4,P5,P6) TO (J3,J6) (P1,P2,P3) TO (J1,J2)

5.0 DC RESISTANCE:

(J3-J6)=(J1-J2)

6.0 RETURN LOSS: (P4-P6)=100 OHMS AND (P1-P3)=100 OHM REF. 1MHz TÓ 30MHz

60MHz TO 80MHz

NOTE: 100 OHMS CONNECTED TO (J1-J2) OR (J3-J6).

7.0 DIELECTRIC WITHSTAND:

(J1, J2) TO (P1, P3) (J3, J6) TO (P4,P6)

8.0 INSERTION LOSS: RS=RL=100 ohms 100KHz TO 100MHz

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

OUTPUT VOLTAGE = 1 V peak PULSE WIDTH= 112nS

10.0 CROSS TALK:

1MHz TO 100MHz

11.0 COMMON TO COMMON MODE ATTENUATION:

TITLE

30MHz TO 100MHz

30pF MAX. @ 1 MHz 30pF MAX. @ 1 MHz

1.2 OHMS MAX.

-18dB MIN.

-12dB MIN.

1500 VAC

1500 VAC

-1.1 dB

3.0 nS MAX

3.0 nS MAX

-40 dB TYP

-35dB TYP

1.0 PINS WITHOUT ELECTRICAL CONNECTION ARE OMITTED

POWER

POWER

2X 75 OHMS

1000pF 2kV

SCHEMATIC

 \cdots

 \cdots

ORIGINATED BY	DATE
Bain Liu	2013-01-09
DRAWN BY	DATE
Duan Jun	2013-01-09

10/100BT **VERTICAL, SHIELDED** PATENTED

PART NO. / DRAWING NO.	STANDA	RD DIM.	[] METRIC DIM. AS REFERENCE			
SI-46020-F	TOL. IN INCH		UNIT : INCH [mm]	REV.: A0		
FILE NAME	.X		SCALE: N/A	SIZE: A4		
SI-46020-F.DWG	.XX		SCALE . N/A			
31-40020-F.DWG	.XXX.	±0.005		PAGE: 2		



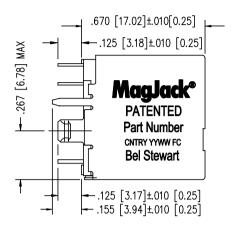
RD+ P6

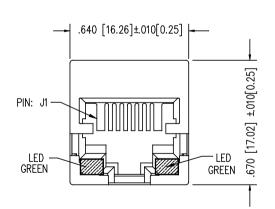
P9

P10

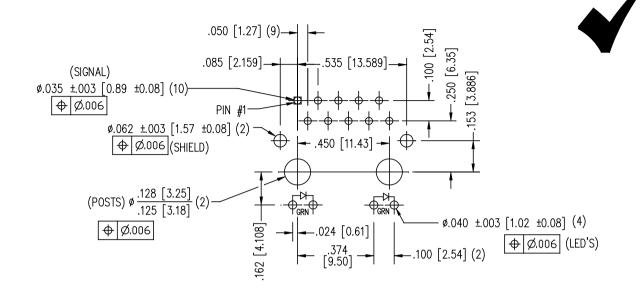
P7

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TITLE



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: 50 MICRO-INCH SELECT
 - CONTACT PLATING: 50 MICRO-INCH SELECTIVE HARD GOLD PLATING OR EQUIVALENT 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]
- 5. 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)

ORIGINATED BY	DATE
Bain Liu	2013-01-09
DRAWN BY	DATE
Duan Jun	2013-01-09

MagJack®
10/100BT
VERTICAL, SHIELDED
PATENTED

PART NO. / DRAWING NO.	STANDA	RD DIM.	[] METRIC DIM. AS REFERENCE			
SI-46020-F	TOL. IN INCH		UNIT : INCH [mm]	REV.: A0		
FILE NAME	.X		SCALE: N/A	SIZE: A4		
OL 40000 E DWO	.xx		SCALE: N/A			
SI-46020-F.DWG	.xxx	±0.005		PAGE: 3		



RoHS