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

DOCUMENT / PART NO.: SI-46004-F

TITLE: 10/100BT, TAB UP, SHIELDED

| ISSUE DESCRIPTION OF CHANGE REVIEWED BY APPROVED BY ECNE | | | | | | | | | | | | | | | | | |
|--|-------|---|----|----|--|------|-------------|---|---|--------------|-------------|-----|----|------|------|--------|------------|
| A1 Update circuit drawing and use new Bain Liu Steve Weller 0638 | ISSUE | DESCRIPTION OF CHANGE | | | | ı | REVIEWED BY | | | Al | APPROVED BY | | | ECN | ۱# | | |
| PAGE 1 2 3 REV. A1 A1 A1 A1 | Α0 | | | | | | David Chan | | D | Danny Kwan | | 062 | 52 | | | | |
| PAGE 1 2 3 REV. A1 A1 A1 | A1 | Update circuit drawing and use new format | | | | | Bain Liu | | S | Steve Weller | | 063 | 89 | | | | |
| REV. A1 A1 A1 | | | | | | | | | | | | | | | | | |
| REV. A1 A1 A1 | | | | | | | | | | | | | | | | | |
| REV. A1 A1 A1 | | | | | | | | | | | | | | | | | |
| REV. A1 A1 A1 | | | | | | | | | | | | | | | | | |
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| REV. A1 A1 A1 | | | | 1 | | | | | | | | | | | | | |
| | PAGE | 1 | 2 | 3 | | | | | | | | | | | | | |
| PAGE | REV. | A1 | A1 | A1 | | | | | | | | | | | | | |
| PAGE COZOT-I NEV AT | PAGE | | | | | | | | | | | | | C02 | 61–F | REV A | . 1 |
| REV. 24-0346-F REV | REV. | | | | | | | | | | | | | 24-0 | 346- | -F REV | / A1 |

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RJ45

ELECTRICAL CHARACTERISTICS @ 25°C

CURRENT CAPABILITY FOR POWER LINES: 400 mA MAX PINS SCHEMATIC 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) 30pF MAX. @ 1 MHz RD-P6 (P1,P2,P3) TO (J1,J2) 30pF MAX. @ 1 MHz **POWER** 5.0 DC RESISTANCE:

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

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

60MHz TO 80MHz

(J3-J6)=(J1-J2)

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:

30MHz TO 100MHz

TITLE

TD+ P1
TCT P2
TD- P3
RD+ P4
TCT P5
RD- P6
P9
POWER

2X 75 OHMS \$ \$

J1 TX+

J2 TX
J3 RX+

J6 RX
J4
J5
J7
J8

NOTES

P7

1.0 PINS WITHOUT ELECTRICAL CONNECTION ARE OMITTED

1000pF 2kV

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

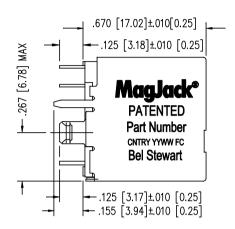
MagJack®
10/100BT
VERTICAL, SHIELDED

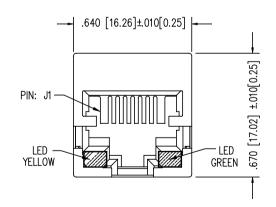
PATENTED

| PART NO. / DRAWING NO. | STANDA | RD DIM. | [] METRIC DIM. AS REFERENCE | | | |
|------------------------|--------------|---------|-----------------------------|-----------|--|--|
| SI-46004-F | TOL. IN INCH | | UNIT : INCH [mm] | REV.: A1 | | |
| FILE NAME | | | SCALE: N/A | CIZE . A4 | | |
| SI-46004-F.DWG | .xx | | SCALE: N/A | SIZE: A4 | | |
| 31-40004-F.DVVG | .XXX | ±0.005 | | PAGE: 2 | | |

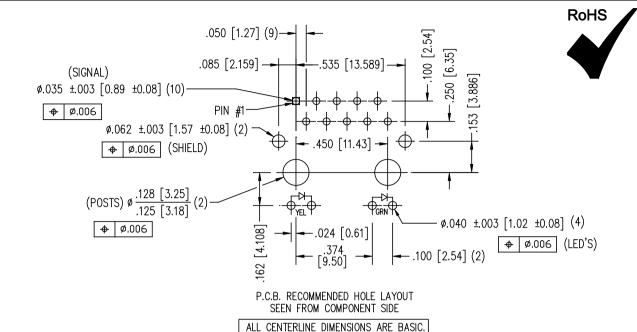


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TITLE



LED POLARITY (ENLARGED VIEW)

SINGLE COLOR LED

| LED SPECIFICATION | | | | | | | | |
|-------------------|------------|-----------------|--------|--|--|--|--|--|
| STANDARD LED | WAVELENGTH | FORWARD V (MAX) | *(TYP) | | | | | |
| GREEN | 565 nm | 2.5 V | 2.2 V | | | | | |
| YELLOW | 590 nm | 2.5 V | 2.1 V | | | | | |

*WITH A FORWARD CURRENT OF 20 mA (TYP)

NOTES:

1. 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.
- 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 |
|---------------|------------|
| Bain Liu | 2013-01-09 |
| DRAWN BY | DATE |
| Duan Jun | 2013-01-09 |

MagJack®
10/100BT
VERTICAL, SHIELDED
PATENTED

| PART NO. / DRAWING NO. | | | | |
|------------------------|--|--|--|--|
| SI-46004-F | | | | |
| FILE NAME | | | | |
| SI-46004-F.DWG | | | | |

| | STANDA | RD DIM. | [] METRIC DIM. AS REFERENCE | | | | |
|--|---------|---------|-----------------------------|----------|--|--|--|
| | TOL. IN | INCH | UNIT : INCH [mm] | REV.: A1 | | | |
| | .X | | SCALE: N/A | SIZE: A4 | | | |
| | .XX | | SCALE: N/A | SIZE: A4 | | | |
| | .XXX | ±0.005 | | PAGE: 3 | | | |

