**DOCUMENT / PART NO.: SI-46001-F**

**TITLE : 10/100BT, VERTICAL, SHIELDED**

<table>
<thead>
<tr>
<th>ISSUE</th>
<th>DESCRIPTION OF CHANGE</th>
<th>REVIEWED BY</th>
<th>APPROVED BY</th>
<th>ECN#</th>
</tr>
</thead>
<tbody>
<tr>
<td>A0</td>
<td>Use new format and production release.</td>
<td>David Chan</td>
<td>Steve Weller</td>
<td>06295</td>
</tr>
<tr>
<td>B0</td>
<td>correct the footprint dimension</td>
<td>Karen Snyder</td>
<td>Steve Weller</td>
<td>06307</td>
</tr>
</tbody>
</table>

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**REV.**

**PAGE**

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C0215-F REV A0

24-0247-F REV B0
ELECTRICAL CHARACTERISTICS @ 25°C

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

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

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

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

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

6.0 RETURN LOSS: (P6-P4)=100 OHMS AND (P1-P3)=100 OHM REF.  
1MHz TO 30MHz : 18dB MIN.  
60MHz TO 80MHz : 12dB MIN.

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

7.0 VOLTAGE WITHSTAND:  
(J1, J2) TO (P1, P3) : 1500 Vrms  
(J3, J6) TO (P4,P6) : 1500 Vrms

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

10.0 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.
LED POLARITY
(ENLARGED VIEW)

SINGLE COLOR LED

LED SPECIFICATION

<table>
<thead>
<tr>
<th>STANDARD LED</th>
<th>WAVELENGTH</th>
<th>FORWARD V (MAX)</th>
<th>*(TYP)</th>
</tr>
</thead>
<tbody>
<tr>
<td>GREEN</td>
<td>565 nm</td>
<td>2.5 V</td>
<td>2.2 V</td>
</tr>
<tr>
<td>YELLOW</td>
<td>590 nm</td>
<td>2.5 V</td>
<td>2.1 V</td>
</tr>
</tbody>
</table>

*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: SELECTIVE GOLD,
   50 MICRO-INCHES MIN. 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 ±0.005 [0.13]
5. WAVE SOLDER COMPATIBLE — PREHEAT 125°C/90SECS.

MagJack®
Part Number
BEL Stewart