

## **ELECTRICAL SPECIFICATIONS:**

1.0 TURNS RATIO: (P7-P6-P8) : (J3-J6) : 1CT : 1CT ± 3% (P1-P3-P2) : (J1-J2) : 1CT : 1CT ± 3%

<u>NOTES</u>

1.0 PINS WITHOUT ELECTRICAL CONNECTION ARE OMITTED.

2.0 INDUCTANCE: (P7-P8) : 350uH MIN. @ 0.1V, 100KHz, 8mA DC Bias (P1-P2) : 350uH MIN. @ 0.1V, 100KHz, 8mA DC Bias

3.0 LEAKAGE INDUCTANCE: P8-P6-P7 (WITH J6 AND J3 SHORT) : 0.3uH MAX. @ 1MHz P2-P3-P1 (WITH J2 AND J1 SHORT) : 0.3uH MAX. @ 1MHz

4.0 INTERWINDING CAPACITANCE: (P8,P6,P7) TO (J6,J3) : 30pf MAX @ 1MHz (P2,P3,P1) TO (J2,J1) : 30pf MAX @ 1MHZ

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

Bel Stewart Connector 11118 Susquehanna Trail, South Glen Rock, Pa 17327-9199 MagJack

http://www.stewartconnector.com

THIS DRAWING AND THE SUBJECT MATTER SHOWN THEREON ARE CONFIDENTIAL AND PROPERTY OF BEL STEWART CONNECTOR AND SHALL NOT BE REPRODUCED, COPIED, OR USED IN ANY MANNER WITHOUT PRIOR WRITTEN CONTENT OF BEL STEWART CONNECTOR. THE SUBJECT MATTER MAY BE PATENTED OR A PATENT MAY BE PENDING.

SHEET DRAWING NO.

717.234.7512

SI-50077

**RECEIVE** 

6.0 RETURN LOSS: (P7-P8)=100 OHMS AND (P1-P2)=100 OHM REF.

 1MHz
 TÓ
 30MHz
 :
 18dB
 MIN.

 30MHz
 TO
 80MHz
 :
 12dB
 MIN.

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

7.0 DIELECTRIC WITHSTAND: (J1, J2) TO (P1, P2) : 1500 VAC

(J3, J6) TO (P7,P8) : 1500 VAC

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: 1-100 MHz : 30 dB TYP

11.0 COMMON TO COMMON MODE ATTENUATION: 1MHz TO 100MHz : 35dB TYP

Bel Stewart Connector 11118 Susquehanna Trail, South Glen Rock, Pa 17327-9199

717.234.7512

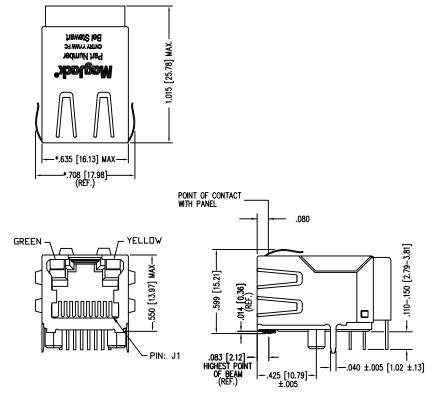
MagJack<sup>®</sup>

http://www.stewartconnector.com

EWART SHEET 2 OF 4

DRAWING NO.

SI-50077

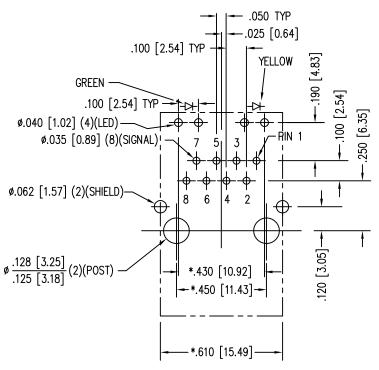


## NOTES:

- TOLERANCES COMPLY WITH F.C.C. DIMENSION REQUIREMENTS
- DIMENSIONS SHOWN WITH "\*" TO BE CENTRAL ABOUT CENTER LINE
- DIMENSIONS SHOWN ARE SUBJECT TO CHANGE WITHOUT NOTICE.
- PIN NOT ELECTRICALLY CONNECTED MAYBE OMITTED.
   SEE ELECTRICAL DRAWING FOR OMITTED PINS.
- STANDARD 50 MICRO-INCH SELECTIVE GOLD PLATING
- HIGH TEMPERATURE REFLOW COMPATABLE 230°C/90 SEC MAX.
- ALL POLYMERS FLAMMABILITY UL94V0 CT750006

| 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



P.C.B. RECOMMENDED HOLE LAYOUT SEEN FROM COMPONENT SIDE TOLERANCE ±.003 [0.08] UNLESS OTHERWISE SPECIFIED

Bel Stewart Connector 11118 Susquehanna Trail, South

11118 Susquehanna Trail, Sour Glen Rock, Pa 17327-9199 717.234.7512 MagJack\*

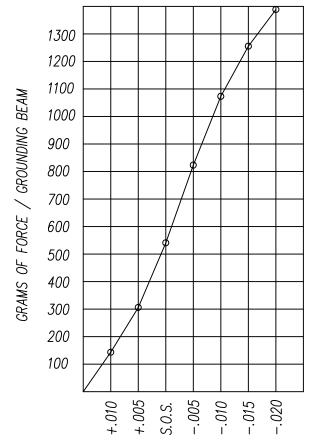
http://www.stewartconnector.com

SHEET 3 OF 4

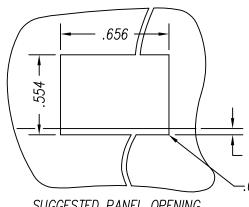
DRAWING NO.

SI-50077 REV.0

THIS DRAWING AND THE SUBJECT MATTER SHOWN THEREON ARE CONFIDENTIAL AND PROPERTY OF BEL STEWART CONNECTOR AND SHALL NOT BE REPRODUCED, COPIED, OR USED IN ANY MANNER WITHOUT PRIOR WRITTEN CONTENT OF BEL STEWART CONNECTOR. THE SUBJECT MATTER MAY BE PATENTED OR A PATENT MAY BE PENDING.



PANEL GROUNDING BEAM DEFLECTION S.O.S. = SUGGESTED OPENING SIZE



POINT OF CONTACT WITH PANEL - .080 -- .275 MAX

THE SUGGESTED PANEL OPENING IS INTENDED TO GIVE THE USER THE ABILITY TO HAVE REASONABLE JACK / PANEL CLEARANCES YET MAINTAIN RELIABLE GROUNDING CAPABILITY. THESE VARIABLES CAN BE ADJUSTED IN EITHER DIRECTION BUT MAY CARRY SOME CONSEQUENCES IN THE FORM OF LOWER MATING FORCES OR TIGHTER ASSEMBLY TOLERANCES. FORCE VALUES ON THE GRAPH ARE GENERAL AVERAGES TAKEN AT THE POINT OF CONTACT SHOWN ABOVE. THE SUGGESTED PANEL OPENING INCLUDES APPROXIMATELY .020 CLEARANCE ON THE SIDES AND TOP AND .013 ON THE BOTTOM, AT PANEL OPENING.

.000 (TOP OF PCB TO BOTTOM OF OPENING) –.010 MAX. RADIUS(4)

SUGGESTED PANEL OPENING

CT720034X1/24-001302

**Bel Stewart Connector** 11118 Susquehanna Trail, South Glen Rock, Pa 17327-9199

717.234.7512

http://www.stewartconnector.com

THIS DRAWING AND THE SUBJECT MATTER SHOWN THEREON ARE CONFIDENTIAL AND PROPERTY OF BEL STEWART CONNECTOR AND SHALL NOT BE REPRODUCED, COPIED, OR USED IN ANY MANNER WITHOUT PRIOR WRITTEN CONTENT OF BEL STEWART CONNECTOR. THE SUBJECT MATTER MAY BE PATENTED OR A PATENT MAY BE PENDING.

SHEET DRAWING NO. 4 OF 4

SI - 500