

ELECTRICAL SPECIFICATIONS:

- 1.0 TURNS RATIO: $(P6-P5-P4) : (J6-J3)$: 1CT : $1CT \pm 3\%$
 $(P3-P2-P1) : (J2-J1)$: 1CT : $1.41CT \pm 3\%$
- 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 INTERWINDING CAPACITANCE: $(P6,P5,P4)$ TO $(J6,J3)$: 30pf TYP. @ 1MHz
 $(P3,P2,P1)$ TO $(J2,J1)$: 30pf TYP. @ 1MHz
- 5.0 DC RESISTANCE: $(J6-J3)=(J2-J1)$: 1.2 ohms Max.

NOTES

1.0 PINS WITHOUT ELECTRICAL CONNECTION ARE OMITTED.

Bel Stewart Connector
 11118 Susquehanna Trail, South
 Glen Rock, Pa 17327-9199
 717.234.7512

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
1 OF 4

DRAWING NO. SI-40235 REV. 04

RECEIVE

TRANSMIT

6.0 RETURN LOSS: 1MHz TO 30MHz
60MHz TO 80MHz

: 18dB MIN.
: 12dB MIN.

12dB MIN.

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

7.0 DIELECTRIC WITHSTAND: (J1, J2) TO (P1, P3)
(J3, J6) TO (P4,P6)

: 1500 VAC
: 1500 VAC

1500 VAC
1500 VAC

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

: 1.1 dB TYP

1.1 dB TYP

9.0 RISE TIME: RS=100 OHMS AND RL = 100 OHMS
OUTPUT VOLTAGE = 1 V peak
PULSE WIDTH= 112nS

: 3.0 nS MAX
: 3.0 nS MAX

3.0 nS MAX
3.0 nS MAX

10.0 CROSS TALK: 1MHz TO 100MHz

: 40 dB TYP

40 dB TYP

11.0 COMMON TO COMMON MODE ATTENUATION: 30MHz TO 100MHz : 35dB TYP

35dB TYP

Bel Stewart Connector
11118 Susquehanna Trail, South
Glen Rock, Pa 17327-9199
717.234.7512

MagJack

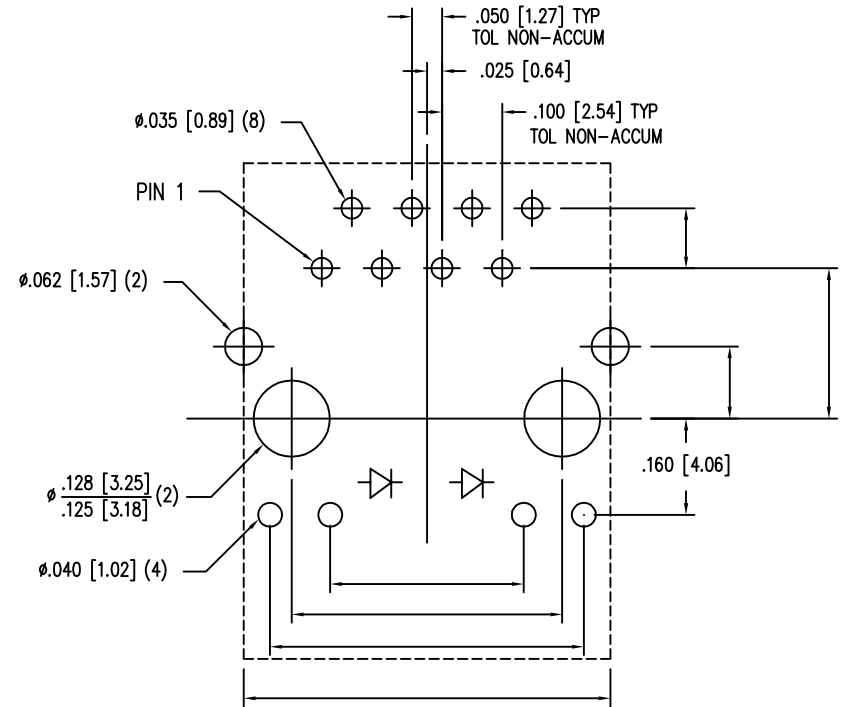
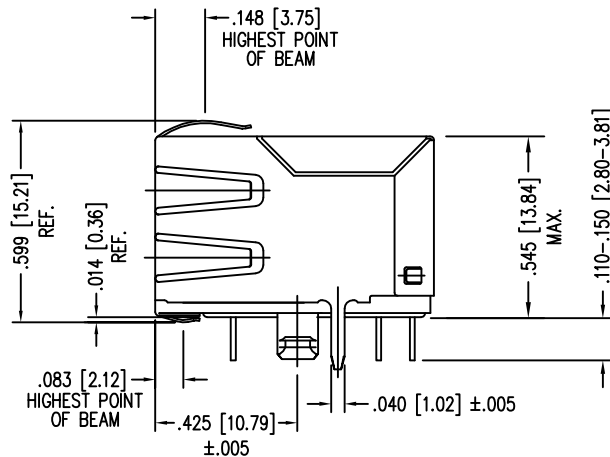
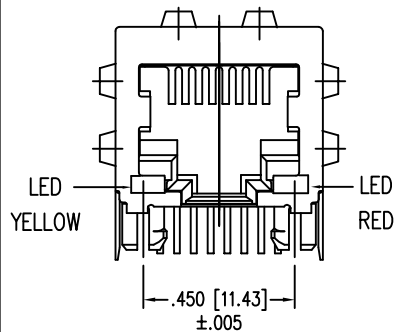
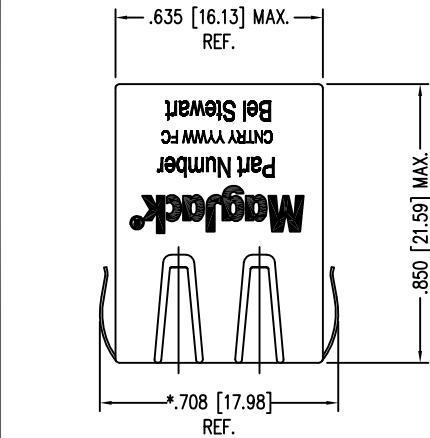
<http://www.stewartconnector.com>

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
2 OF 4

DRAWING NO.

SI-40235 REV. 04



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

NOTES:

- 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.
- PIN NOT ELECTRICALLY CONNECTED MAYBE OMITTED.
SEE ELECTRICAL DRAWING FOR OMITTED PINS.
- TOLERANCES COMPLY WITH F.C.C. DIMENSION REQUIREMENTS.
- THE SUGGESTED PANEL OPENING IS INTENDED TO GIVE
USER THE ABILITY TO HAVE REASONABLE JACK/PANEL
CLEARANCES, YET MAINTAIN GROUNDING CAPABILITY.

LED SPECIFICATION			
STANDARD LED	WAVELENGTH	* Forward V (MAX)	(TYP)
YELLOW	590 nm	2.5 V	2.1 V
RED	625 nm	2.5 V	2.0 V

*WITH A FORWARD CURRENT OF 20 mA

CT720034X1/24-0066

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.

Bel Stewart Connector
11118 Susquehanna Trail, South
Glen Rock, Pa 17327-9199
717.234.7512

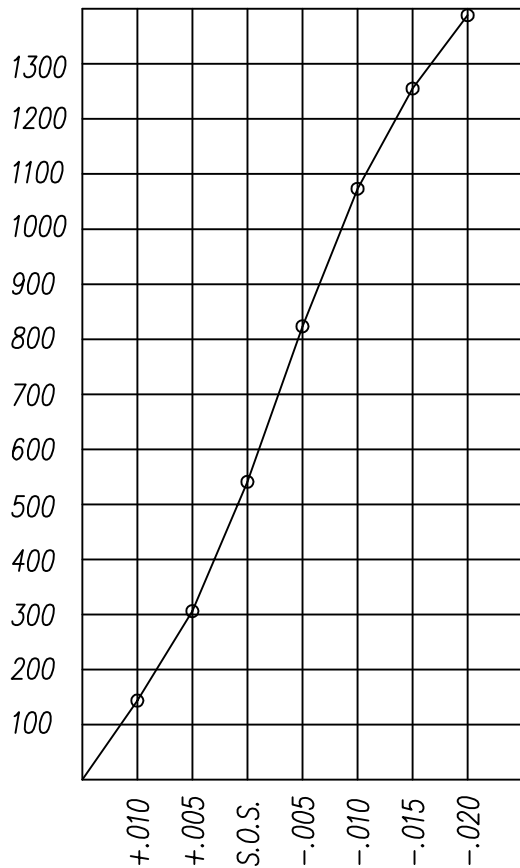
MagJack[®]

<http://www.stewartconnector.com>

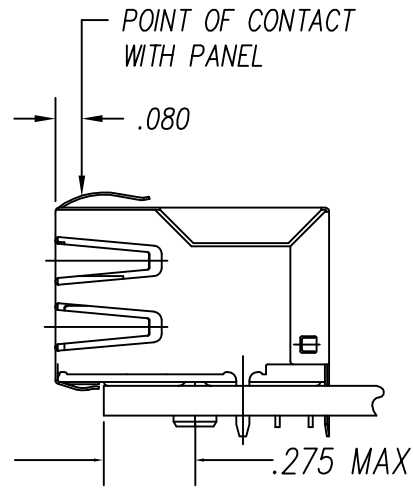
SHEET
3 OF 4

DRAWING NO.

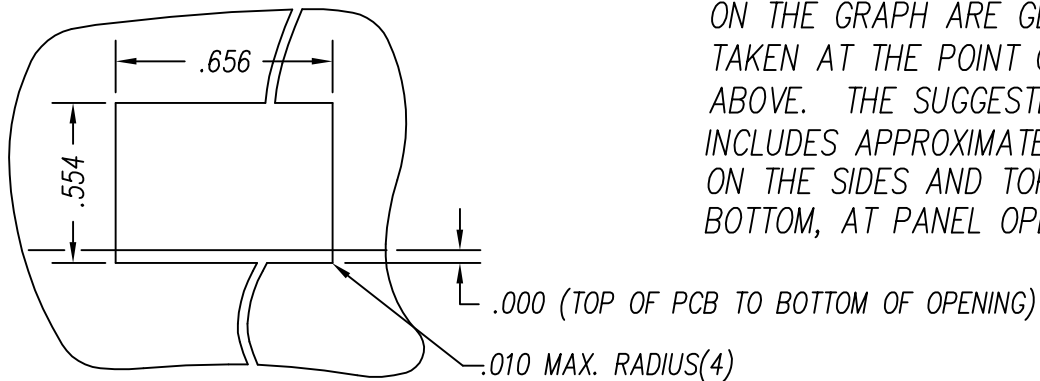
SI-40235 REV. 04



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



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.



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	
SHEET	DRAWING NO.	REV.	
4 OF 4	SI-40235	04	

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.