

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China







THE INFORMATION CONTAINED HEREIN IS CONSIDERED "PROPRIETARY" TO BEL FUSE INC. AND SHALL NOT BE COPIED, REPRODUCED OR DISCLOSED WITHOUT THE WRITTEN APPROVAL OF BEL FUSE INC.



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

COMPONENTS FOR A CONNECTED PLANET®

DOCUMENT / PART NO.: SI-52003-F

TITLE: 10/100BT, PoE; TAB UP, SHIELDED

ISSUE	USE NEW FORMAT AND PRODUCTION RELEASE Update the circuit drawing							REVIEWED BY David Chan Bain Liu			A	Danny Kwan Steve Weller			06257 06383		
Α0											D						
A 1											S						
								+									
PAGE	1	2	3	4			 										
REV.	A1	A1	A1	A1	-		 										
PAGE							 							C5	128-F	REV	A2
REV.							 							24-	0435-	-F RE	V AO

THE INFORMATION CONTAINED HEREIN IS CONSIDERED "PROPRIETARY" TO BEL FUSE INC. AND SHALL NOT BE COPIED. REPRODUCED OR DISCLOSED WITHOUT THE WRITTEN APPROVAL OF BEL FUSE INC.



RJ45

ELECTRICAL CHARACTERISTICS @ 25°C

1.0 TURNS RATIO:	(P1-P3): (J1-J2) (P4-P5): (J3-J6)
------------------	--------------------------------------

1CT: 1CT ±2% 1CT: 1CT ±2%

2.0 DC RESISTANCE:

(P1-P3): (P4-P5) 1.4 OHMS (J1-J2):(J3-J6)1.2 OHMS

3.0 INDUCTANCE:

(P1-P3) (P4-P5) 350uH MIN. @ 0.1V, 100KHz, 8mA DC BIAS 350uH MIN. @ 0.1V, 100KHz, 8mA DC BIAS

4.0 LEAKAGE INDUCTANCE:

(P4-P5) WITH J6 AND J3 SHORT 0.3uH MAX. @ 1MHz (P1-P3) WITH J2 AND J1 SHORT 0.3uH MAX. @ 1MHz

5.0 INTERWINDING CAPACITANCE:

(P4,P5) TO (J3,J6) 60pF TYP @ 1MHz (P1.P2.P3) TO (J1.J2) 60pF TYP @ 1MHz

6.0 RETURN LOSS: (P1-P3)=100 OHMS REF. AND (P4-P5)=100 OHM REF.

1MHz TO 30MHz 30MHz TO 60MHz -18dB MIN. -(19-20LOG(f/30MHz)) 60MHz TO 80MHz 12dB MIN.

7.0 DIELECTRIC WITHSTAND:

(J3,J6) TO (P4,P5) 1500Vms (J1,J2) TO (P1,P3) 1500Vrms

8.0 INSERTION LOSS: RS=RL=100 OHMS 1MHz-65MHz

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

3.0nS MAX 3.0nS MAX

10.0 CROSS TALK:

-35dB MIN.

TITLE

11.0 CM TO CM ATTENUATION: 30MHz TO 100MHz

-30dB MIN. 100MHz TO 130MHz -20dB MIN.

350mA MAX @ 57 VDC CONTINUOUS 500mA MAX @ 57 VDC FOR 200 MILLSECONDS 12.0 BALANCED DC LINE CURRENT:

1CT : 1CT TD+ P1 J1 TX+ COMMON CT P2 J2 TX-TD- P3 1CT : 1CT RD+ P4 J3 RX+ J6 RX-RD- P5 VC+ P8 VC- P9 J4 VC+ P10 J5 J7 VC- P11 J8 4X22nF 100Vdc 4X 75 OHM 1nF 2kVdc NOTES SHIELD 7777

SCHEMATIC

1.0 DESIGNED TO SUPPORT IEEE 802.3

PINS

ORIGINATED BY	DATE
Zeng Xiaochun	SI-52003-F
DRAWN BY	DATE
Duan Jun	SI-52003-F

MagJack® 10/100BT, PoE **TAB UP, SHIELDED** PATENTED

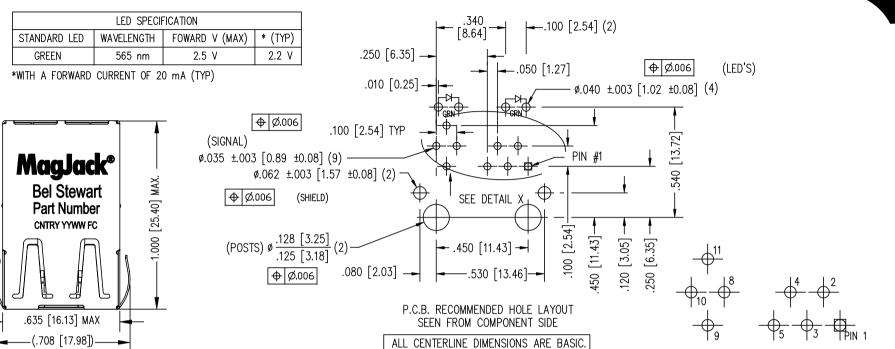
-1dB MAX

PART NO. / DRAWING NO.	STANDA	RD DIM.	[] METRIC DIM. AS REFERENCE			
SI-52003-F	TOL. IN INCH		UNIT : INCH [mm]	REV.: A1		
FILE NAME	.X		SCALE: N/A	SIZE: A4		
SI-52003-F.DWG	.XX		_			
31-32003-1 .DVV3	XXX.	±0.005		PAGE: 2		



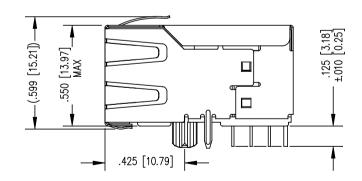
THE INFORMATION CONTAINED HEREIN IS CONSIDERED "PROPRIETARY" TO BEL FUSE INC. AND SHALL NOT BE COPIED, REPRODUCED OR DISCLOSED WITHOUT THE WRITTEN APPROVAL OF BEL FUSE INC.





GREEN GREEN

PIN: J1



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

DETAIL X

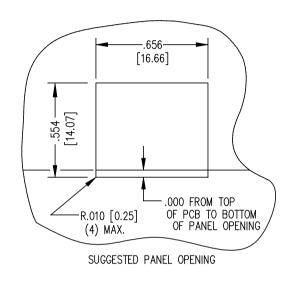
2. PIN NOT ELECTRICALLY CONNECTED MAYBE OMITTED. SEE ELECTRICAL DRAWING FOR OMITTED PINS.

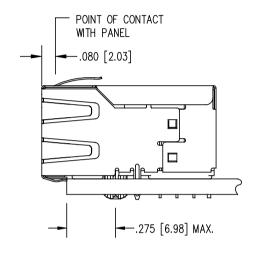
- 3. TOLERANCES COMPLY WITH F.C.C. DIMENSION REQUIREMENTS.
- 4. ALL TOLERANCES NOT OTHERWISE SPECIFIED TO BE ±.005 [0.13]
- REFLOW AND WAVE SOLDER COMPATIBLE -260°C FOR 10 SECONDS MAX.

ORIGINATED BY	DATE	TITLE Marchaele	PART NO. / DRAWING NO.	STANDARD DIM.		[] METRIC DIM. AS REF		
Zeng Xiaochun	SI-52003-F	MagJack [®]	SI-52003-F	TOL. IN	INCH	UNIT : INCH [mm]	REV.: A1	bei
DRAWN BY	DATE		FILE NAME	.X		SCALE: N/A	SIZE: A4	COMPONENTS FOR A
		TAB UP, SHIELDED	SI-52003-F.DWG	.XX				PLANET
Duan Jun	SI-52003-F	PATENTED	31-32003-1 .DVVG	.XXX	±0.005		PAGE: 3	

THE INFORMATION CONTAINED HEREIN IS CONSIDERED "PROPRIETARY" TO BEL FUSE INC. AND SHALL NOT BE COPIED, REPRODUCED OR DISCLOSED WITHOUT THE WRITTEN APPROVAL OF BEL FUSE INC.







- THE SUGGESTED PANEL OPENING IS INTENDED
 TO GIVE THE USER THE ABILITY TO HAVE
 REASONABLE JACK / PANEL CLEARANCES
 YET MAINTAIN RELIABLE GROUNDING
 CAPABILITY.
- 2. ALL TOLERANCES NOT OTHERWISE SPECIFIED TO BE ±005 [0.13]

ORIGINATED BY	DATE	TITLE
Zeng Xiaochun	SI-52003-F	
DRAWN BY	DATE	
Duan Jun	SI-52003-F	

MagJack®
10/100BT, PoE
TAB UP, SHIELDED
PATENTED

	PART NO. / DRAWING NO.	STANDA	RD DIM.	[] METRIC DIM. AS REFERENCE			
SI-52003-F FILE NAME		TOL. IN	INCH	UNIT : INCH [mm]	REV.: A1		
		.X		SCALE: N/A	SIZE: A4		
	SI-52003-F.DWG	.xx					
	C. 02003-1 .D110	.xxx	±0.005		PAGE: 4		

