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



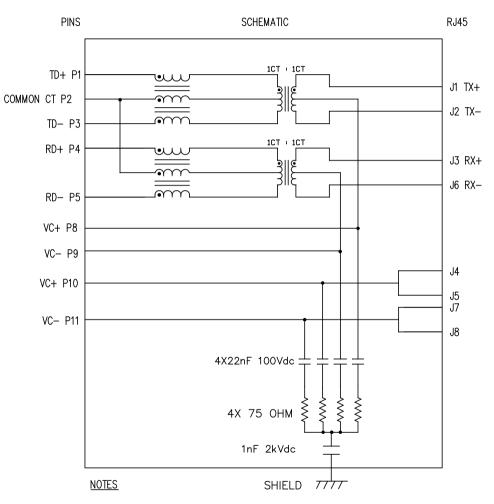
DOCUMENT / PART NO.: SI-52008-F

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

ISSUE		DE	SCRI	PTIO	NOF	CHAN	IGE			REVIE	WED	BY	Α	PPRO	VED E	BY	EC	N#
A0	USE NEW FORMAT AND PRODUCTION RELEASE Update drawing format, remove PIN#6 from footprint						David Chan Bain Liu			D	Danny Kwan Steve Weller			062	257			
B0										s				06346				
B1	Update the circuit drawing								Bain Liu			Steve Weller			r	06383		
PAGE	1	2	3	4														
REV.	B1	B1	B1	B1														
PAGE																	FREV	
REV.															24–(		-F RE	v R0

## 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) (J1-J2): (J3-J6)	1.4 OHMS 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 (P1–P3) WITH J2 AND J1 SHORT	0.3uH MAX. @ 1MHz 0.3uH MAX. @ 1MHz
5.0 INTERWINDING CAPACITANCE: (P4,P5) T0 (J3,J6) (P1,P2,P3) T0 (J1,J2)	60pF TYP @ 1MHz 60pF TYP @ 1MHz
6.0 RETURN LOSS: (P1-P3)=100 OHMS REF. AND (P4-P5)=100 OHM REF. 1MHz TO 30MHz 30MHz TO 60MHz 60MHz TO 80MHz	—18dB MIN. —(19—20LOG(f/30MHz)) 12dB MIN.
7.0 DIELECTRIC WITHSTAND: (J3,J6) TO (P4,P5) (J1,J2) TO (P1,P3)	1500Vms 1500Vrms
8.0 INSERTION LOSS: RS=RL=100 OHMS 1MHz-65MHz	-1dB MAX
9.0 RISE TIME: RS=RL=100 OHMS OUTPUT VOLTAGE = 1V PEAK PULSE WDTH = 112nS	3.0nS MAX 3.0nS MAX
10.0 CROSS TALK: 1MHz-65MHz	-35dB MIN.
11.0 CM TO CM ATTENUATION: 30MHz TO 100MHz 100MHz TO 130MHz	-30dB MIN. -20dB MIN.
12.0 BALANCED DC LINE CURRENT:	350mA MAX @ 57 VDC CONTINUOUS 500mA MAX @ 57 VDC FOR 200 MILLSECONDS



1.0 DESIGNED TO SUPPORT IEEE 802.3

ORIGINATED BY	DATE		PART NO. / DRAWING NO.	STANDA	ARD DIM.	[] METRIC DIM. AS REF	ERENCE		
Zeng Xiaochun	2012-04-18		SI-52008-F	TOL. IN	I INCH	UNIT : INCH [mm]	REV. : B1	bel	
DRAWN BY	DATE	10/100BT,PoE	FILE NAME	X		SCALE: N/A	SIZE : A4		
Duan Jun	2012-04-18	TAB UP,SHIELDED PATENTED	SI-52008-F.DWG		±0.005		PAGE: 2	CONNECTED PLANET	
M999185 REV C0 This document is electronically generated. This is a controlled copy if used internally									

RoHS

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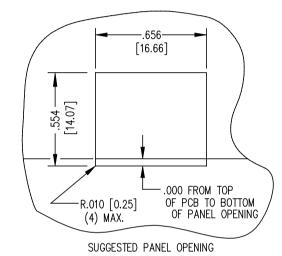
WRITTEN APPROVAL OF BEL FUSE INC.	1				
		0.340 [8.64]	- 0.100 [2.54] (2)		
	SPECIFICATION	0.010 [0.25]	∅0.040±0.003 [∅1.02±0.08] (4) ⊕ ∅.006		
STANDARD LED WAVELEN		E DETAIL X			
GREEN 565 T YELLOW 590			φ		
		0.050 [1.27] (9)			
*WITH A FORWARD CURRENT	$(11P) = \frac{0.035\pm0.00}{ \Phi 0.006 }$		0450 [11.43] (2)		
	Ø0.062±0.003	5 [Ø1.57±0.08] (2)	[11:43		
MagJack®		$0.128 \left[ \begin{array}{c} 3.25 \\ 3.18 \end{array} \right] (2)$			
		<u>0.125 [ 3.18 ]</u> (			
PATENTED	L YAX				
Part Number		OSED TRACES ON PCB	[3.89] [3.65] [3.05] [3		
Bel Stewart	.0000 [25.40] MAX. dx3 0M	IN THIS AREA	0.150 [3.81] 0.150 [3.89] 0.150 [3.89] 0.150 [3.89] 0.150 [3.89] 0.150 [3.89]		
	000	0.450 [11.43] (2)			
				4   2	
	4	P.C.B. RECOMMENDED HOLE SEEN FROM COMPONENT	SIDE $\psi_{10}$		
.635 [16.13] MAX		ALL CENTERLINE DIMENSIONS	ARE BASIC	$\downarrow$ $\downarrow$ $\downarrow$	
			$- \psi_9$	$- \psi_5 - \psi_3 - \psi_{IN 1}$	
	LLOW			DETAIL X	
			NOTES:		
			1. CONNECTOR MATERIALS:		
		±010 [0.25]	HOUSING: THERMOPLASTIC UL94		
	[15.21] MAX	10 [	CONTACT/SHIELD: COPPER ALL SHIELD PLATING: NICKEL OR TI		
	550 [15.21]) 550 [13.97]		CONTACT PLATING: 50 MICRO-IN	ICH SELECTIVE HARD GOLD PLAT	ING
	.550			ENT IN CONTACT AREA	
		┉╔┉╢┠╾╩┈┈┈╌╡╴╴╴┝	2. PIN NOT ELECTRICALLY CONNECT SEE ELECTRICAL DRAWING FOR C		
			3. TOLERANCES COMPLY WITH F.C.C		
	PIN: J1 .425 [10.79]	] 🖛 🕴	4. ALL TOLERANCES NOT OTHERWIS	E SPECIFIED TO BE ±.005 [0.13]	
1			<ol> <li>REFLOW AND WAVE SOLDER CON 10 SECONDS MAX.</li> </ol>	IPATIBLE -260°C FOR	
ORIGINATED BY DATE TITLE	<b>MagJack®</b>	PART NO. / DRAWING NO.		IM. AS REFERENCE	bel
Zeng Xiaochun 2012-04-18	10/100BT,PoE	SI-52008-F	TOL. IN INCH UNIT : INCH	[mm] REV. : B1	
DRAWN BY DATE	TAB UP,SHIELDED		.X .XX SCALE : N/A	A SIZE : A4	COMPONENTSFOR A COMMECTED PLANET
Duan Jun 2012-04-18	PATENTED	SI-52008-F.DWG	.XXX ±0.005	PAGE: 3	🗸

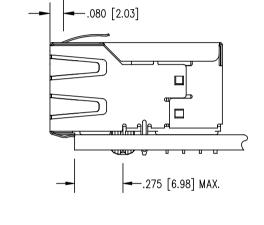
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POINT OF CONTACT WITH PANEL

 THE SUGGESTED PANEL OPENING IS INTENDED TO GIVE THE USER THE ABILITY TO HAVE REASONABLE JACK / PANEL CLEARANCES YET MAINTAIN RELIABLE GROUNDING CAPABILITY.
 ALL TOLERANCES NOT OTHERWISE SPECIFIED

TO BE ±.005 [0.13]

ORIGINATED BY	DATE	<b>MagJack®</b>	PART NO. / DRAWING NO.	STANDARD DIM.	[] METRIC DIM. AS REFI	ERENCE	bol
Zeng Xiaochun	2012-04-18		SI-52008-F	TOL. IN INCH	UNIT : INCH [mm]	REV. : B1	
DRAWN BY	DATE		FILE NAME	X. .XX.	SCALE: N/A	SIZE : A4	COMPONENTSFORA CONNECTED PLANET
Duan Jun	2012-04-18	TAB UP,SHIELDED PATENTED	SI-52008-F.DWG	.XXX ±0.005		PAGE: 4	

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