

Suggested PCB Pad Layout  
Component Side View

NOTES : 1. Tolerance : PCB ±0.05mm  
Connector ±0.25mm  
2. Connector dimensions comply with FCC 68.5 dimension requirements



DESCRIPTION:

RJ45 With internal Magnetics Connector  
Designed to support such applications as: Ethernet Equipment Complex, Switches, Routers, Firewalls, Servers and Hub  
Internal magnetics are 100% electrically tested for functionality per IEEE802.3af/at requirement

ELECTRICAL:

RoHS peak wave solder temperature rating 235°C  
High performance for maximum EMI suppression  
JACK CAVITY CONFORMS TO FCC RULES AND REGULATIONS, PART 68 SUBPART F.  
INSERTION FORCE: 2 CONTACTS----350g 4 CONTACTS----500g  
6 CONTACTS----750g 8 CONTACTS----900g  
10 CONTACTS----1050g

MECHANICAL:

RETENTION STRENGTH: 7.7Kgs BETWEEN JACK AND PLUG  
DURABILITY: 750 MATING CYCLES Mini

HOUSING: 1) GLASS FILLED PA66 (UL 94V-0)  
2) GLASS FILLED PA46/LCP (UL 94V-0)  
3) GLASS FILLED PBT (UL 94V-0)

MATERIAL:

SPRING WIRE:  
1) 0.2-0.45mm DIA PHOSPHOR BRONZE GOLD PLATING OVER NICKEL  
2) 0.2-0.35mm THICKNESS PHOSPHOR BRONZE ALLOY SELECTIVE GOLD PLATING OVER NICKEL;

SHIELDING:

1) 0.12-0.24mm THICKNESS COPPER ALLOY WITH TIN PLATED  
2) Stainless Thickness=0.2mm Pre-soldering(SUS 201)

GOLD PLATING: 3µ, 6µ, 15µ, 30µ, 50µ

WORKING TEMPERATURE: -20°C~70°C

TOLERANCES UNLESS OTHERWISE SPECIFIED :

0~10±0.15, 10~20±0.2, 20~40±0.25, 40~70±0.3, ≥70±0.4

"B" with the company code

Series of products:  
60: Double deck RJ45 connector+transformer series (in sidelong footprint);  
69: Double deck RJ45 connector+transformer series (in vertical footprint);  
50: Single RJ45 + transformer series;  
52/53/55/56 LED/56/57/59: Ordinary RJ45 series; D: that strip line series;  
40: Conversion said Connectivity  
80: Series that UK;  
91: Automotive connector public Block;  
92: Automotive connector mother Block;  
93: HDMI the head;  
94: HDMI mother Block;  
95: SMT series;  
96: RHS for switches

Family code (sequence id) : 1-99

Type of product code:  
G: Gigabit RJ45 transformer;  
F: 100Base RJ45 transformer;  
W: for no transformer RJ45 products;  
M: Series for board-to-board code  
Number of magnetic ring

The No. of circuit

Product definition LOGO:  
1- Press "B-TOP" 2-No "B-TOP"  
3- Other companies LOGO

Product definition plastic materials:  
1-PA66, 2-PA46, 3-PA, 4-PA6, 5-PBT, 6-ABS, 7-PAPET, 8-PC, 9-LCP

Pin definition of the product:  
F-Pin after; B-Pin back; C- No definition of the product

Electroplating product definition:  
gold-plated terminals (degrees after nickel plated)  
1-2µ; 2-3µ; 3-5µ; 4-15µ; 5-30µ;  
6-50µ; 7-(Ni-50µ, Sn-80-120µ)

Product shielding definition:  
0-no shielding shell; 1-without shielding shell shrapnel;  
2-shielding a shell shrapnel; 3-half-shield shell;

Products luminous definition:  
0- No LED; 1-Left Yellow Right Green; 2- Left Green Right Yellow; 3- Double Green; 4- Double Yellow; 5- LED straight for the pin; 6- A special definition; 7- Single linear LEDs

Products output:  
1-2X1, 2-2X2, 4-2X4, 5-2X6, 6-2X6, 8-2X8, A-1X1,  
B-1X2, C-1X4, D-1X5, E-1X6, T-1X8, U-(USB+RJ45), P-TAB  
UPIX1, H-TAB UPIX2, K-TAB UPIX4.

B N (Z) G X - M-A B C D - E H I

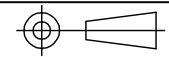
**B-TOP** 东莞市博腾电子科技有限公司  
Dongguan BtopTech Electronic Technology Co., Ltd.

DIM.	TOL.	UNIT:	mm
X	±0.30	SCALE:	1:1
X.X	±0.20	SHEET:	1 of 2
X.XX	±0.15	DWG. SIZE:	A4
X.XXX	±0.10	LAYER:	XXXX
GENERAL ANGLE: ±3°			

WEBSITE:	WWW.BTOPTECH.COM WWW.BTOPTECH.CN
TEL:	0769-38928198
FAX:	0769-38928199
DRAWN:	Tammy
CHECKED:	Jason
APPROVED:	zhu

REVISIONS				
REV.	DESCRIPTION	ECN NO.	NAME	DATE
XA	NEW RELEASE	xxxx	Jason	2017-Sep-28

TITLE: B50(30-11)G12-210-A003-C52(TAB DOWN 1X1 PORT)  
PART NO.: TAB-DOWN 10/100/1000BASE W/O SHELL W/O LED



A

B

C

D

E

Meets or exceeds IEEE 802.3 standard for 10/100/1000 Base-TX  
 350 uH minimum OCL with 8mA DC bias current  
 Available with or without LEDs  
 Minimum 1500Vrms isolation per IEEE802.3 requirement  
 Operating temperature 0°C to +70°C  
 Storage temperature -40°C to +85°C

TRANSFORMER ELECTRICAL SPECIFICATIONS AT 25°C

Turns Ratio TD1/2/3/4	EMI Fingers	LEDs (L/R)	Insertion Loss (dB max.)	Return Loss (dB min.)				Cross talk (dB min.)			C.M.R. (dB min.)		Hi - pot ( Vrms )
				1-125MHz	1-30MHz	30-60MHz	60-80MHz	80-100MHz	1-30MHz	30-60MHz	60-100MHz	10-60MHz	
1CT:1CT	NO	NO	-1.2	-18	-16	-12	-10	-40	-35	-30	-40	-30	1500

SCHEMATIC:

**B-TOP** 东莞市博腾电子科技有限公司  
 Dongguan BtopTech Electronic Technology Co., Ltd.

DIM.	TOL.	UNIT:	mm
X	±0.30	SCALE:	1:1
X.X	±0.20	SHEET:	2 of 2
X.XX	±0.15	DWG. SIZE:	A4
X.XXX	±0.10	LAYER:	XXXX
GENERAL ANGLE:		±3°	

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ARTICLE: B-TOP-001