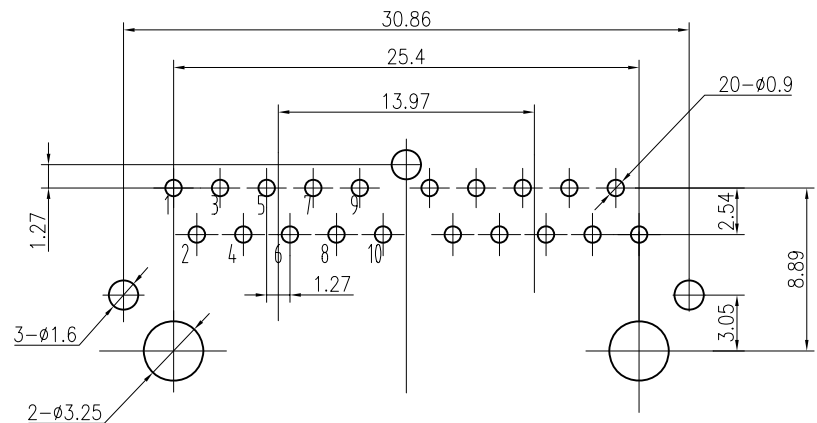
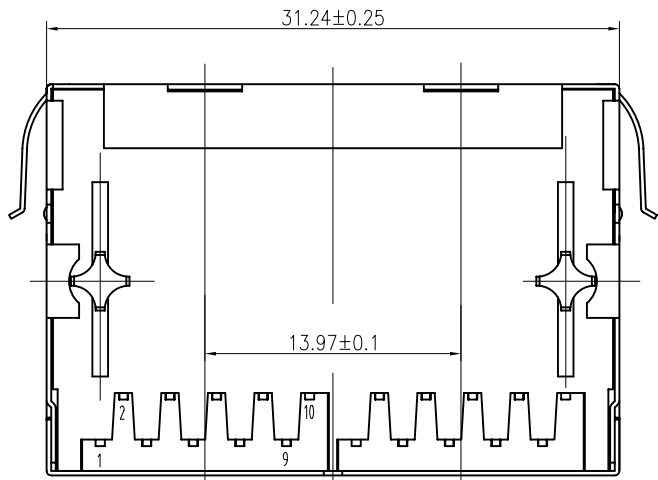
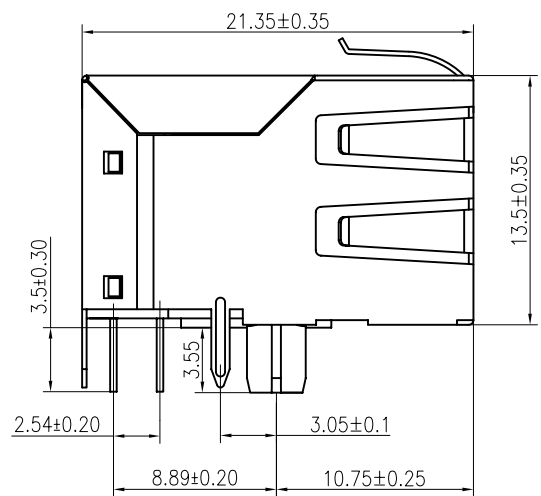
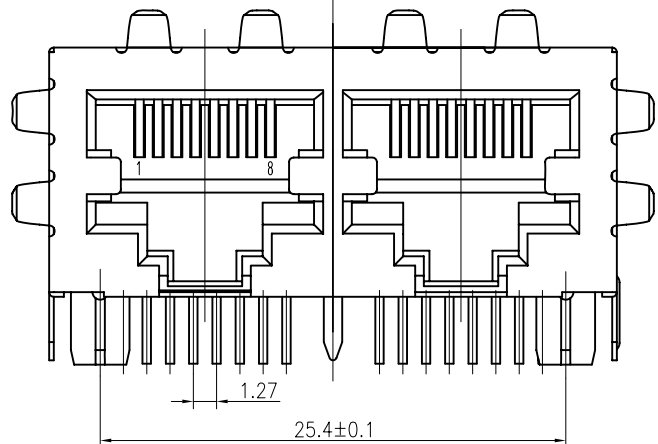


1

2



PCB BOARD LAYOUT



Specification:  
 1:TOLERANCES UNLESS OTHERWISE SPECIFIED :  
 0~10±0.15, 10~20±0.2, 20~40±0.25,  
 2:JACK CAVITY CONFORMS TO FCC RULES AND

**B-TOP**® 东莞博腾电子科技有限公司  
 Dongguan BroadTop Electronic Technology Co., Ltd.

Designed  
 Checked  
 Approved

MATERIAL  
 SCALE 2.5:1 UNIT mm MODEL NO.

DESCRIPTION B50(88-08)PF4-151-B023-B12(1X2 POE EMI)

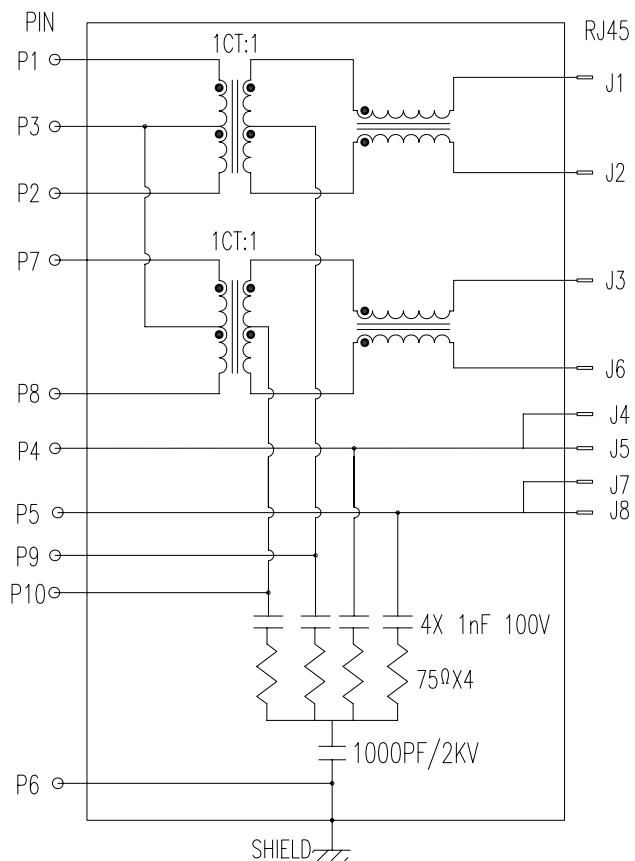
FIRST ANGLE PROJECTION

TEL: 0769-38926198  
 FAX: 0769-38926199  
 Website www.BtopTech.cn  
 www.BtopTech.com

REV.

1

2



### DESCRIPTION

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

**ELECTRICAL:** RoHS peak wave solder temperature rating 235℃  
 High performance for maximum EMI suppression  
 350uH minmum OCL with 8mA bias current  
 PoE rating:15W,350mA,48V (For PoE Products only)

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

**MATERIAL:** HOUSING: 1) GLASS FILLED PA66 (UL 94V-0)  
 2) GLASS FILLED PA46/LCP (UL 94V-0)  
 3) GLASS FILLED PBT (UL 94V-0)  
 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: 0.12-0.24mm THICKNESS COPPER ALLOY WITH TIN PLATED  
 GOLD PLATING: 3μ", 6μ", 15μ", 30μ", 50μ"  
 WORKING TEMPERATURE: -20℃~70℃  
 TOLERANCES UNLESS OTHERWISE SPECIFIED : 0~10±0.15, 10~20±0.2, 20~40±0.25, 40~70±0.3, >70±0.4



### ELECTRICAL SPECIFICATIONS AT 25 °C

Insertion Loss dB max	Return Loss dB min			Crosstalk(db TYP)			Common Mode Rejection (dB TYP)		Hipot(vrms)
	1-100MHz	1-30MHz	30- 60MHz	60- 100MHz	1-30MHz	30- 60MHz	60- 100MHz	1-50MHz	
-1.0	-18	-16	-12	-40	-35	-30	-30	-20	1500/0.5mA

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

"B" with the company code

Series of products: 60:Double deck RJ45 connector + transformer series(In sidelong footprint); 59: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;DX: 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: Digitbit RJ45 transformer; F: 100Base RJ45 transformer;  
 R:for no transformer RJ45 products; W: 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-PA9T,8-PC

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-F μ" ; 2-3 μ" ;3-6 μ" ; 4-15 μ" ; 5-30 μ" ; 6-50 μ" ; 7-(Ni-50 μ" ,Sn-80-120 μ" );

Product shielding definition: 0 - no shielding shell; 1 - without shielding shell shrapnel; 2 - shielding a shell shrapnel; 3 - a 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 out port " 1-2X1 2-2X2 4-2X4 5-2X5 6-2X6 8-2X8 A-1X11 B-1X2 C-1X4 D-1X5 " E-1X6 T-1X8 U-(USB+RJ45) " P-TAB UP1X1 H-TAB UP1X2 K-TAB UP1X4 "

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

Designed	MATERIAL			DESCRIPTION			BT FP4-151		
Checked	SCALE 1.8:1			UNIT	mm	MODEL NO.	REV.		
Approved									