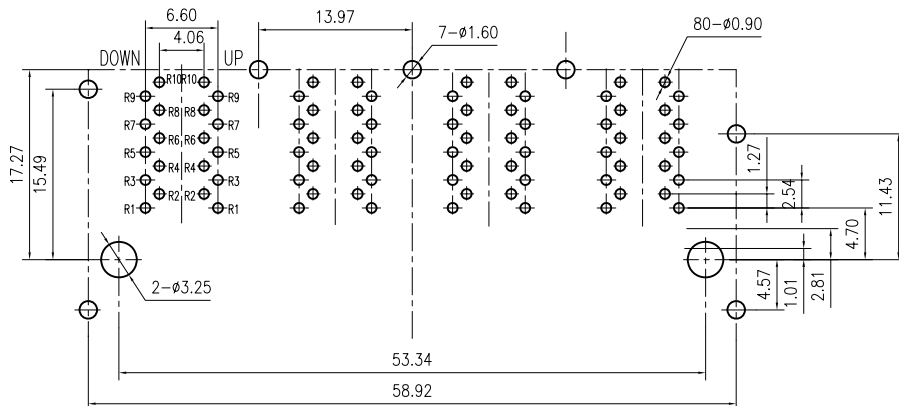
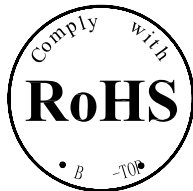
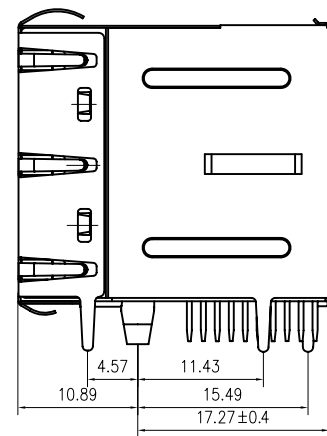
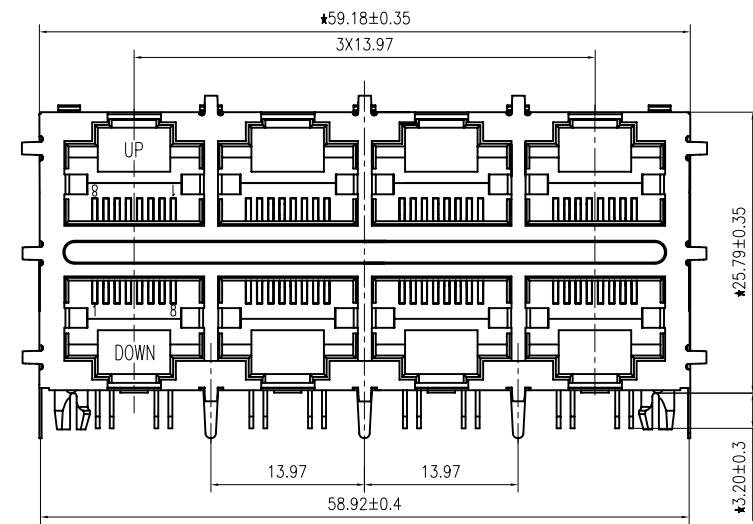
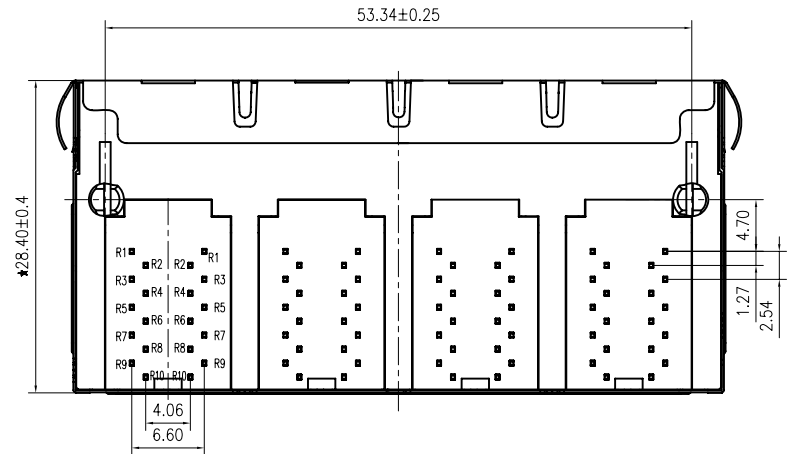


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PCB BOARD LAYOUT



1:TOLERANCES UNLESS OTHERWISE SPECIFIED :  
 0~10±0.15、10~20±0.2、20~40±0.25、  
 40~70±0.3、≥70±0.4  
 2:JACK CAVITY CONFORMS TO FCC RULES AND  
 REGULATIONS,PART 68 SUBPART F.

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

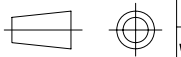
Designed  
 Checked  
 Approved

MATERIAL  
 SCALE 1.5:1

DESCRIPTION  
 MODEL NO.

B59(117-09)FP4-203-4022-C12(2X4 EMI POE 10PIN)

FIRST ANGLE PROJECTION



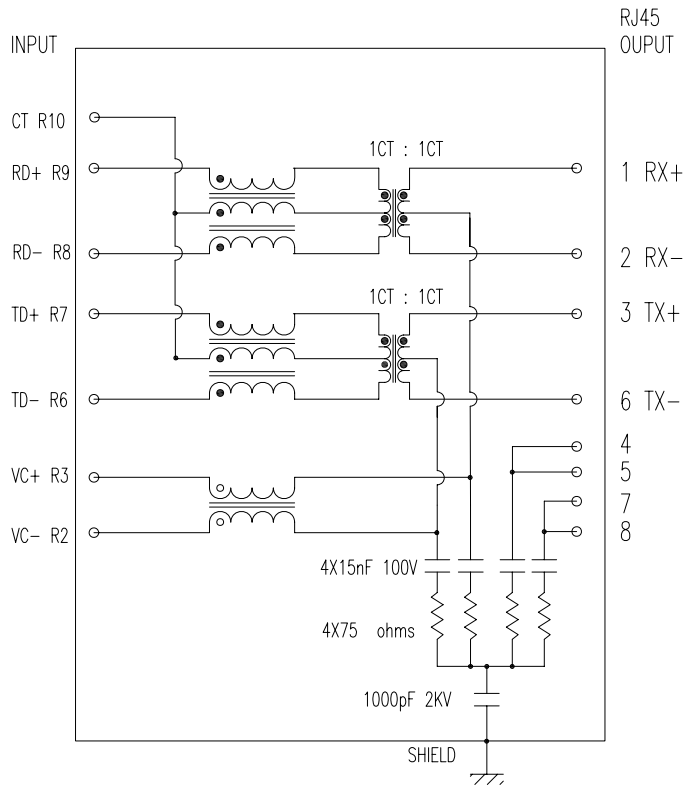
TEL: 0769-38926198  
 FAX: 0769-38926199  
 Website: www.BtopTech.cn  
 www.BtopTech.com

REV. 1.1

20170722

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### DESCRIPTION

**ELECTRICAL:** RJ45 With internal Magnetics Connector  
 Designe 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  
 RoHS peak wave solder temperature rating 235°C  
 High performance for maximum EMI suppression  
 350uH minnum OCL with 8mA bias current  
 PoE rating:15W 350mA,48V;PoE+ rating:30W,750mA,57V;PoE++ rating:60W,1000mA,57V (For PoE Products only)

**MECHANICAL:** JACK CAVITY CONFORMS TO FCC RULES AND REGULATIONS,PART 68 SUBPART F.  
 INSERTION FORCE: 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/PA6T/PA9T/LCP<265°C> (UL 94V-0)  
 3) GLASS FILLED PBT/PA/ABS/PC (UL 94V-0)

SPRING WIRE: 0.25-0.35mm THICKNESS PHOSPHOR BRONZE ALLOY SELECTIVE GOLD PLATING OVER NICKEL<50-80µm> OVER TIN<60-120µm>  
 GOLD PLATING: 3µm, 6µm, 15µm, 30µm, 50µm  
 SHIELDING: 0.2-0.24mm THICKNESS COPPER ALLOY WITH NICKEL<50-100µm> PLATED  
 Storage: -40°C~85°C Relative Humidity<70%  
 Operating: 0°C~+70°C



### ELECTRICAL SPECIFICATIONS AT 25°C

Insertion Loss dB max	Return Loss dB min	Crosstalk(dB TYP)	Common Mode Rejection (dB TYP)	Hipot(vrms)
1-125MHz	1-30MHz	30- 80MHz	1- 100MHz	1-100MHz
-1.2	-18	-18+20log(f/30MHz)	-30	-30
				1500/0.5mA OR 2250DC/0.1mA

**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: Gigabit 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,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-F µm ; 2-3 µm ; 3-6 µm ; 4-15 µm ; 5-30 µm ; 6-50 µm ; 7-(NI-50 µm ,Sn-80-120 µm );

Product shielding definition: 0 - no shielding shell; 1 - without shielding shell shrapnel; 2 - shiekling 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-1X1" B-1X2" C-1X4" D-1X5 " E-1X6" I-1X8" U=(USB+RJ45) P-TAB UP1X1" H-TAB UP1X2" K-TAB UP1X4"

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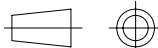
Designed  
 Checked  
 Approved

MATERIAL

DESCRIPTION

BT PF4-203

FIRST ANGLE PROJECTION



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

SCALE

1.8:1

UNIT

mm

MODEL NO.

B80010020311

REV.