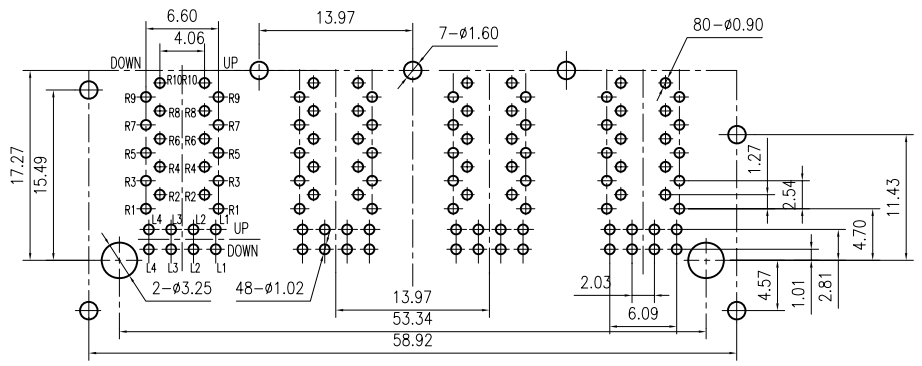
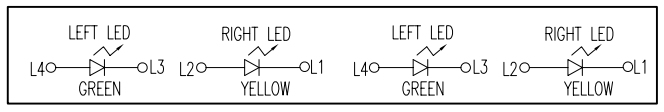


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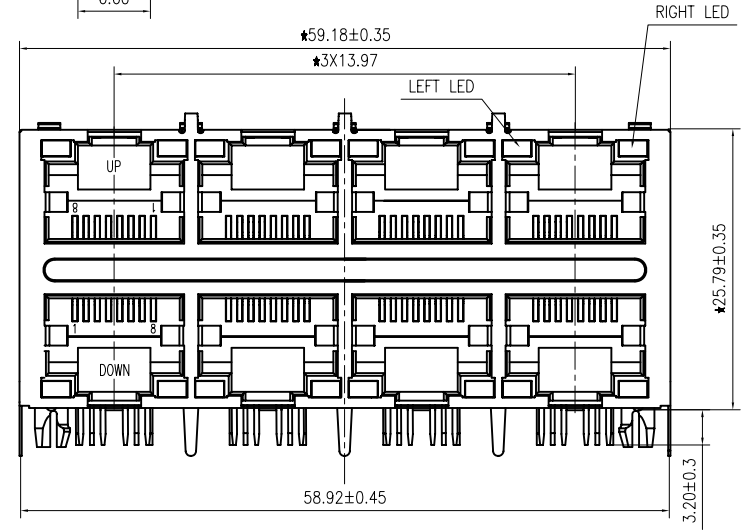
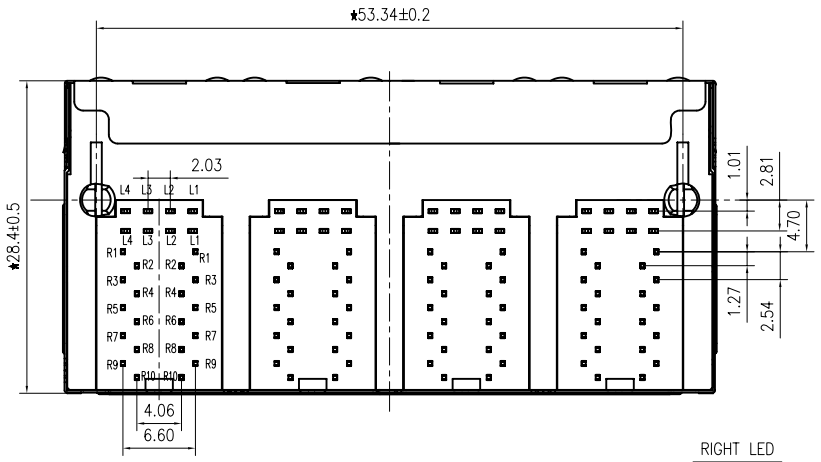
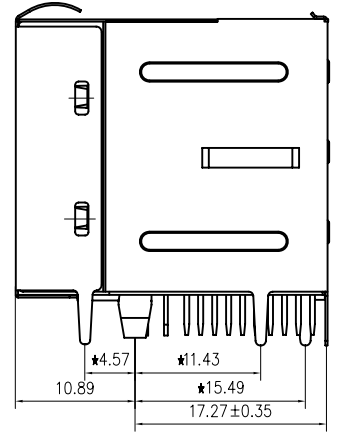
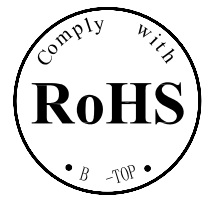


PCB BOARD LAYOUT



LED Specification

Standard LED Color	LED Wavelength	Forward (V MAX)	Typical (V TYP)	Luminous Intensity
Green	560-580 nm	2.5V	2.1-2.2V	9-25 MCD
Yellow	580-610 nm	2.5V	2.1-2.2V	9-30 MCD
Orange	580-610 nm	2.5V	2.1-2.2V	50-100 MCD



- LED intensity/wavelength measured with Photo Research PR-650 Colormeter
- With a forward current of 20 mA, Absolute Maximum Ratings (Ta=25°C)
- TOLERANCES UNLESS OTHERWISE SPECIFIED :  
 0~10±0.15, 10~20±0.2, 20~40±0.25,  
 40~70±0.3, ≥70±0.4
- JACK CAVITY CONFORMS TO FCC RULES AND REGULATIONS, PART 68 SUBPART F.
- OVER: All materials must meet Greenconn requirement for environment protection

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

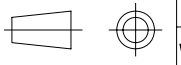
Designed  
 Checked  
 Approved

MATERIAL  
 SCALE 1.5:1  
 UNIT mm

DESCRIPTION  
 MODEL NO.

B59(123-43)PF4-178-4223-C12(2X4 POE G-Y LED 3EM)

FIRST ANGLE PROJECTION



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

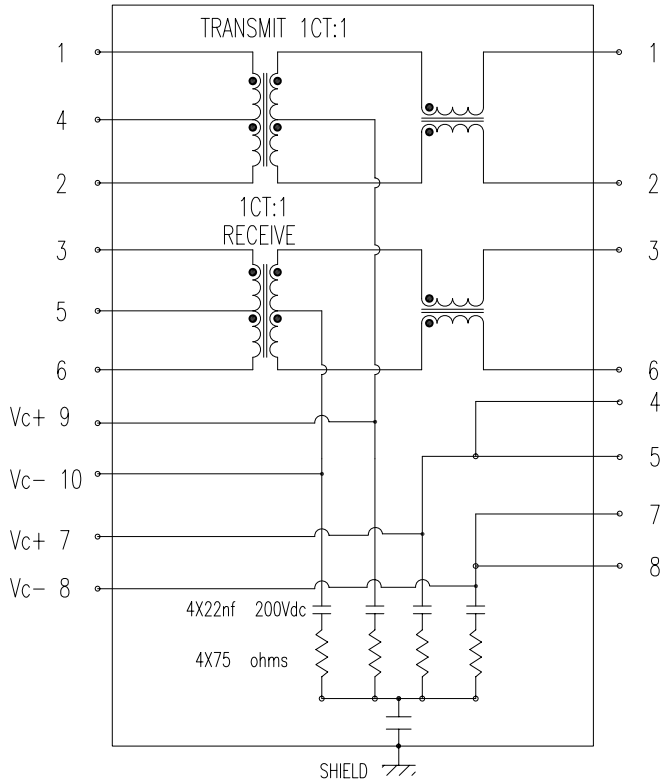
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1

2

CONNECTOR SOLDER SIDE RJ45 CONTACT SIDE



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 IEEE802.3af/at requirement  
 RoHS peak wave solder temperature rating 235℃  
 High performance for maximum EMI suppression  
 350uH minimum OCL with 8mA bias current; DCR: 1.4 Ohms Max  
 HIPOT:1.5KVrms MIN,60S; TURN RATIO:1:1±3%  
 PoE rating:15W 350mA,48V;PoE+ rating:30W,750mA,57V;PoE++ rating:60W,1000mA,57V (For PoE Products only)  
 JACK CAVITY CONFORMS TO FCC RULES AND REGULATIONS,PART 68 SUBPART F.

**Surge Protection:**  
 TEC 6100-4-5(L-L 1kV Criteion B)  
 TEC 6100-4-5(L-L 2kV Criteion C)  
 TEC 6100-4-5(L-G 4kV Criteion B)  
 TEC 6100-4-5(L-G 6kV Criteion C)

**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℃) (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(50-80μ" )  
 OVER TINC(60-120μ" )

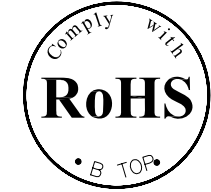
GOLD PLATING: 3μ", 6μ", 15μ", 30μ", 50μ"

Signal pin: 0.35\*0.42mm(OR:0.4\*0.4mm) THICKNESS COPPER ALLOY WITH BOTTOM LAYER NI 30~50U" OVER BRIGHT TIN 60~120U"

SHIELDING: 0.2-0.24mm THICKNESS COPPER ALLOY WITH NICKEL(50-100μ" ) PLATED

Storage: -40℃~85℃ Relative Humidity<70%

Operating: 0℃~70℃



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;32/53/55/56 LED/56/57/59: Ordinary RJ45 series;0X: that strip line series; 40: Conversion said Connectivity: 80: Series that 18; 91: Automotive connector mother Block;92: Automotive connector mother Block; 93: HDMI the head;94: HDMI mother Block; 95: SMT series; 96: BHS for switches

Family code (sequence id):1-99

Type of product code: G: Gigabit RJ45 transformer; F: 100Base RJ45 transformer; Y: for no transformer RJ45 products; X: 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: 2-3μ" ;3-6μ" ;4-15μ" ;5-30μ" ;6-50μ" ;7-100μ" ;8-20-120μ" );

Product shielding definition: 0 - no shielding shell; 1 - without shielding shell shrapnet; 2 - shielding a shell shrapnet; 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 part: 1-201 2-232 4-204 5-205 6-203 8-218 9-191 B-192 G-194 K-195 E-198 F-199 H-199H-195 J-198 LP191 H-198 LP192 K-198 LP194

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 Dongguan BroadTop Electronic Technology Co., Ltd.

Designed

Checked

Approved

MATERIAL

SCALE 1.8:1

UNIT mm

DESCRIPTION

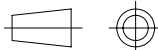
BT PF4-178

MODEL NO.

B80010017811

REV.

FIRST ANGLE PROJECTION



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