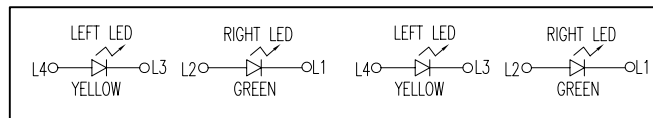


PCB BOARD LAYOUT



## 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

1. LED intensity/wavelength measured with Photo Research PR-650 Colormeter

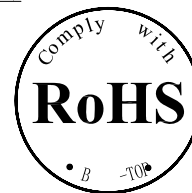
2. With a forward current of 20 mA, Absolute Maximum Ratings (Ta=25°C)

1: TOLERANCES UNLESS OTHERWISE SPECIFIED :

0~10±0.15, 10~20±0.2, 20~40±0.25,

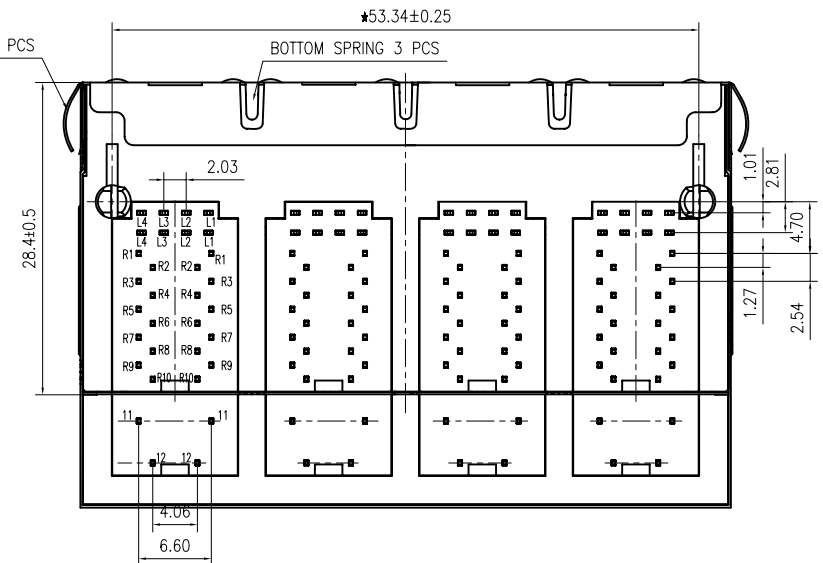
40~70±0.3, ≥70±0.4

2: JACK CAVITY CONFORMS TO FCC RULES AND REGULATIONS, PART 68 SUBPART F.

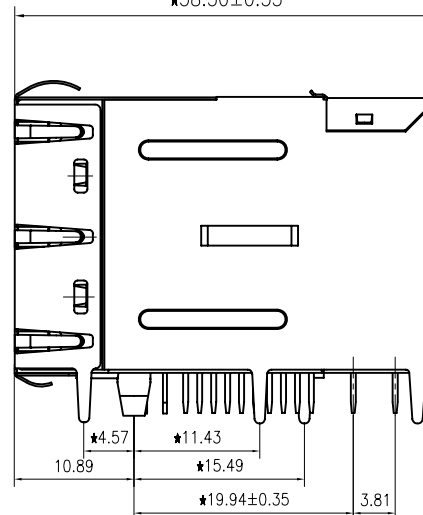


SIDE SPRING 9 PCS

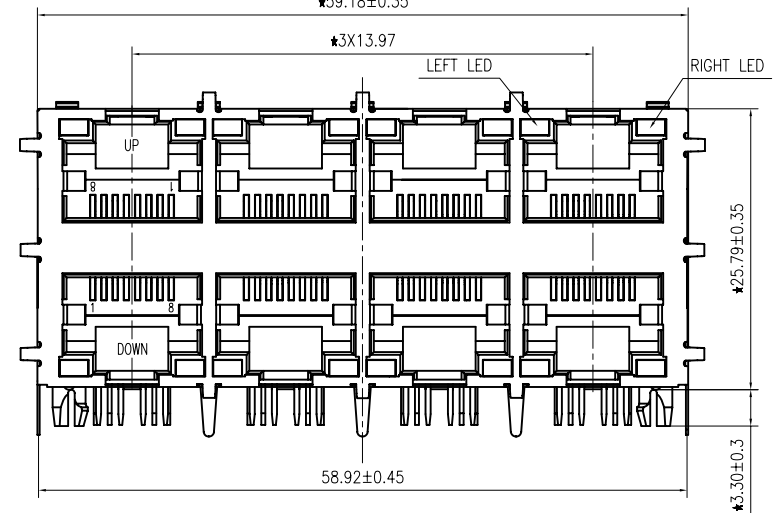
BOTTOM SPRING 3 PCS



★38.30±0.35



★59.18±0.35



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Dongguan BroadTop Electronic Technology Co., Ltd.

Designed

Checked

Approved

27.50±0.35

SCALE

1.5:1

UNIT

mm

MODEL NO.

DESCRIPTION B59(119-05)FP4-242A-4125-C12((2X4 POE+ 100 EMI Y-G LED)

REV.

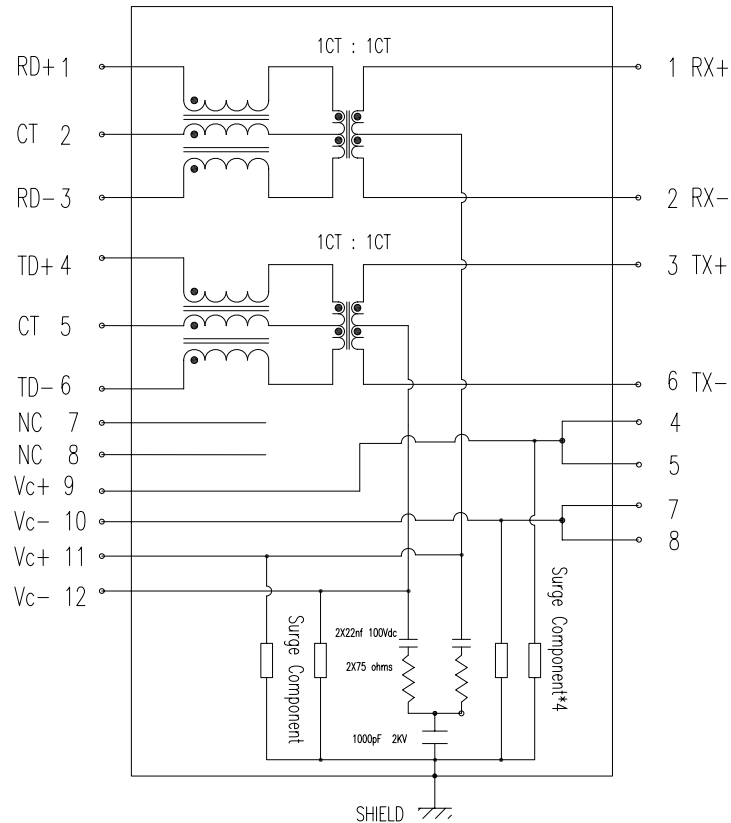
FIRST ANGLE  
PROJECTIONTEL: 0769-38926198  
FAX: 0769-38926199

Website

www.BtopTech.cn  
www.BtopTech.com

CONNETOR SOLDER SIDE

RJ45 CONTACT SIDE



## 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

## DESCRIPTION

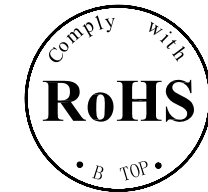
RJ45 With internal Magnetics Connector  
Designde to support such applications as:Ethernet Equipment Complex,Switches,Routers,Firewalls,Servers and Hub  
Internal magnetics are 100% electrically tested for functionality per IEEE802.3af/at requirement

**ELECTRICAL:** RoHS peak wave solder temperature rating 235℃  
High performance for maximum EMI suppression  
350uH minnum OCL with 8mA bias current; DCR: 1.4 Ohms Max  
HIPOT:1.5KVrms MIN,60S; TURN RATIO:1:1±3%  
PoE rating:30W,650mA,48V (For PoE Products only); Surge protection 4Kv  
JACK CAVITY CONFORMS TO FCC RULES AND REGULATIONS,PART 68 SUBPART F.

**MECHANICAL:** 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



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: NIS 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-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 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-1X1" B-1X2" C-1X4" D-1X5 "E-1X8" F-1X8" G-(USB+RJ45) " P-TAB UP1X1" H-TAB UP1X2" K-TAB UP1X4"

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Dongguan BroadTop Electronic Technology Co., Ltd.

Designed

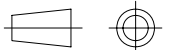
Checked

Approved

MATERIAL

DESCRIPTION

BT FP4-242A POE+ 防雷

FIRST ANGLE  
PROJECTION

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

SCALE

1.8:1

UNIT

mm

MODEL NO.

B80020024211

REV.