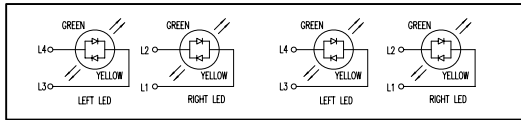
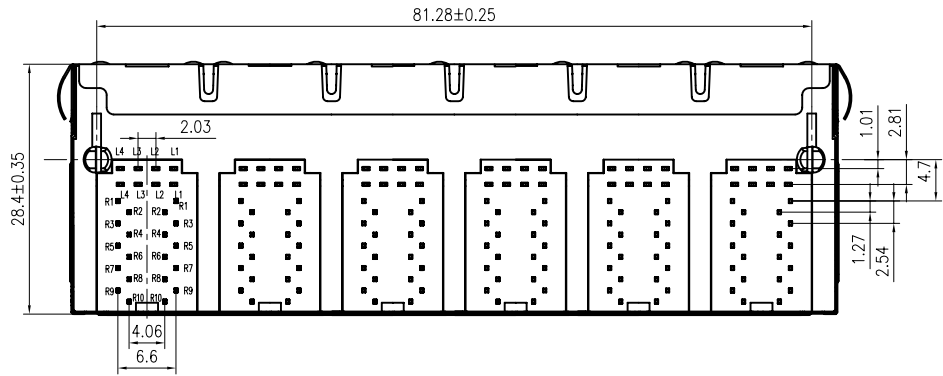


PCB BOARD LAYOUT



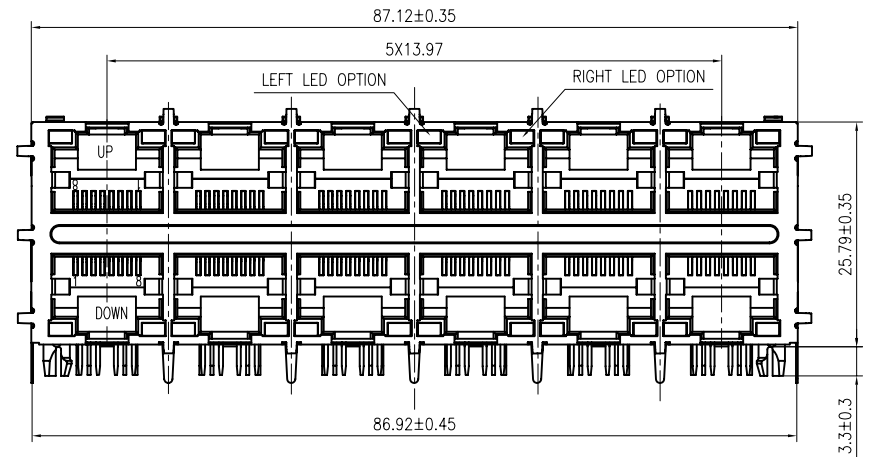
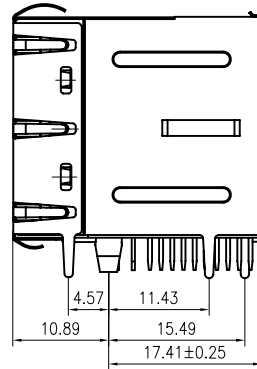
LED Specification

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)

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.



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 Dongguan BroadTop Electronic Technology Co., Ltd.

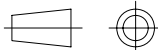
Designed

MATERIAL

DESCRIPTION

B59(173-20)G8-101-6623-C12(2X6 GY-GY LED EMI)

FIRST ANGLE PROJECTION



TEL: 0769-38926198  
 FAX: 0769-38926199

Website

www.BtopTech.cn  
 www.BtopTech.com

Checked

Approved

SCALE

1.2:1

UNIT

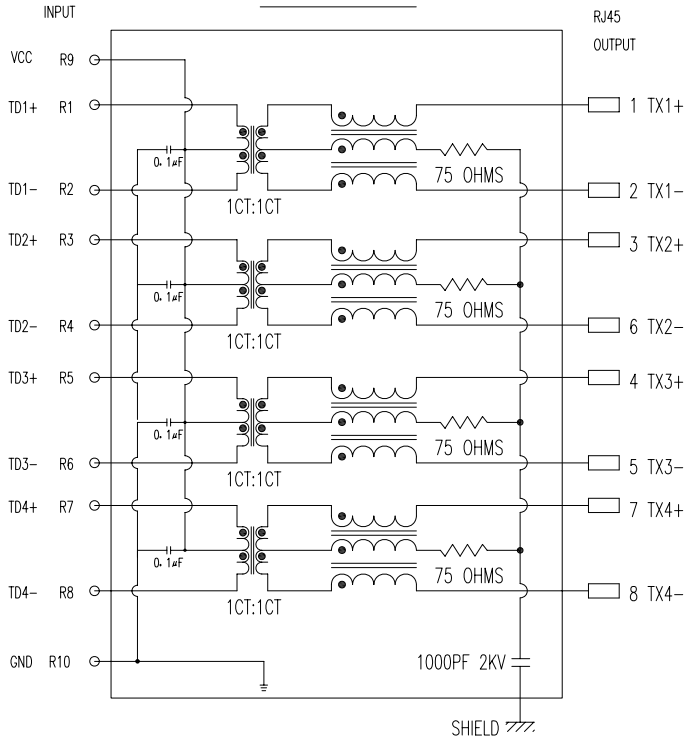
mm

MODEL NO.

REV.

V1.0

### SCHEMATIC



### DESCRIPTION

RJ45 With internal Magnetics Connector

Design 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°C  
 High performance for maximum EMI suppression  
 350uH minimum OCL with 8mA bias current  
 PoE rating: 15W, 350mA, 48V (For PoE Products only)

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

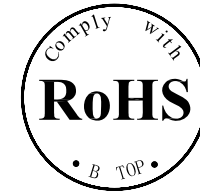
**HOUSING:** 1) GLASS FILLED PA66 (UL 94V-0)  
 2) GLASS FILLED PA46/LCP (UL 94V-0)  
 3) GLASS FILLED PBT (UL 94V-0)

**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:** 0.12-0.24mm THICKNESS COPPER ALLOY WITH TIN PLATED  
**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



### 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	50-150MHz	
-1.0	-18	-16	-12	-40	-35	-30	-30	-20	1500/0.5mA	

"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: BMS 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; W: Series for board-to-board code

**Number of magnetic ring**

**The No. of circuit**

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

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" ; 6-60 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-1X6 I-1X8 U-(USB+RJ45) P-TAB UP1X1 H-TAB UP1X2 K-TAB UP1X4

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 Dongguan BroadTop Electronic Technology Co., Ltd.

Designed

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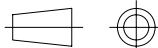
Approved

MATERIAL

DESCRIPTION

BT G8-101

FIRST ANGLE PROJECTION



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

SCALE

1.8:1

UNIT

mm

MODEL NO.

B80020010111

REV.

1.0