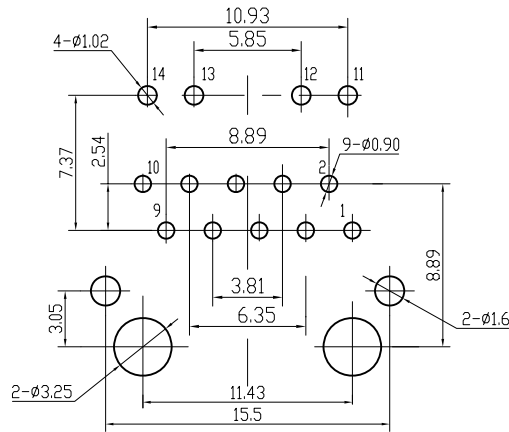
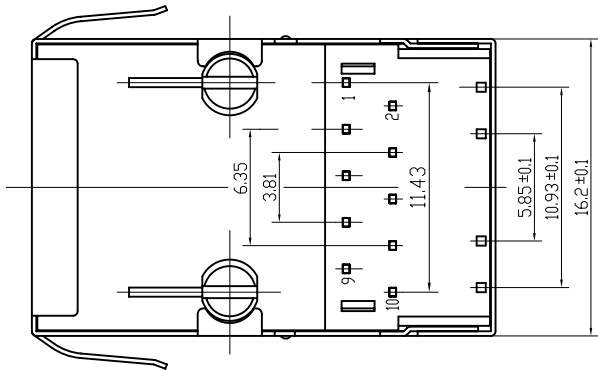
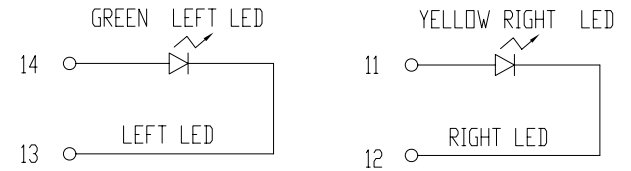


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PCB BOARD LAYOUT



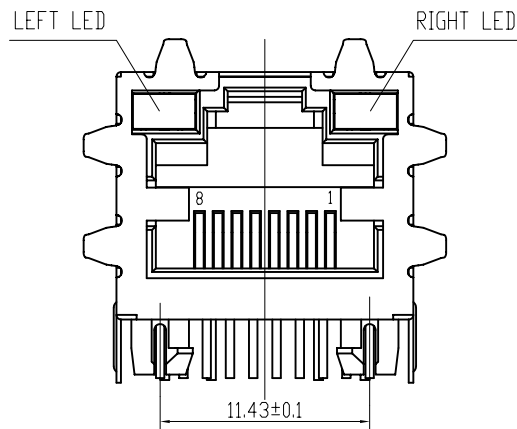
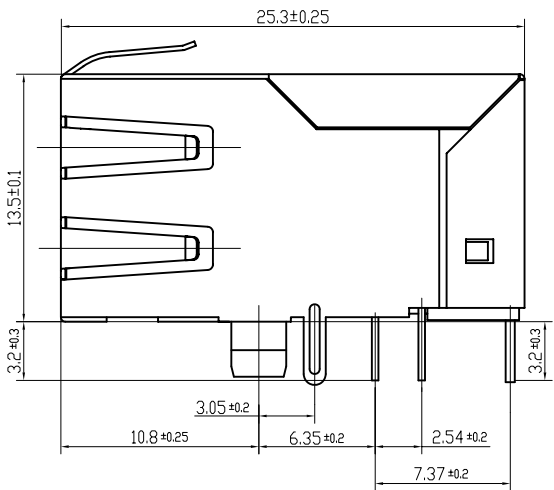
LED Specification

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

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.



**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

DESCRIPTION B50(02-23)G8-120-P223-B12(TAB UP 1X1 G-Y(-+) LED EMI)  
 MODEL NO.  
 REV. V1.0

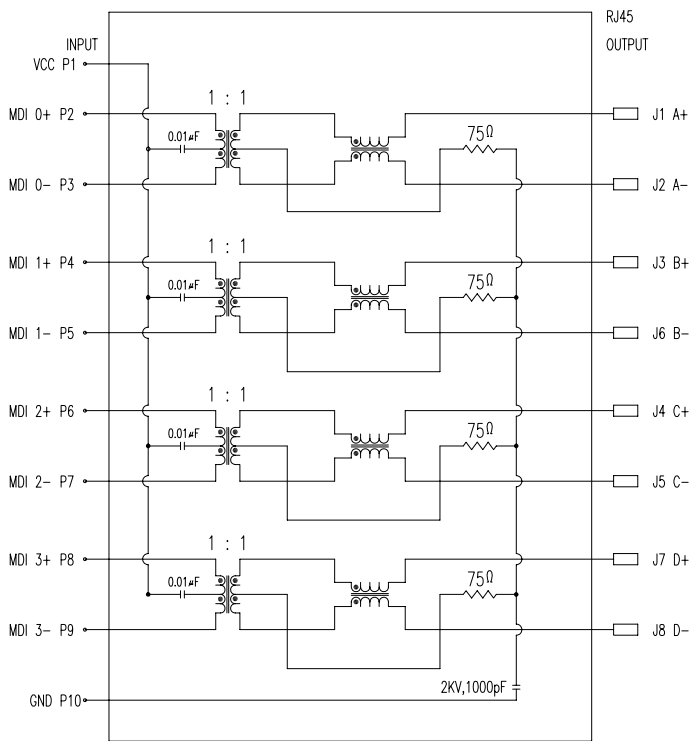
FIRST ANGLE PROJECTION

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

1

2

### SHEMATIC RV1



### 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 IEEE802.3af/at requirement

**ELECTRICAL:** RoHS peak wave solder temperature rating 235°C

High performance for maximum EMI suppression

350µH 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 (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

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: -40°C~85°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)
1-125MHz	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); 69: 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; IX: 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: RIS for switches

Family code (sequence id) : 1-99

Type of product code: G: Gigabit RJ45 transformer; F: 100Base RJ45 transformer; F1: 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 LOGO ; 2- No LOGO ; 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" ; 7-1Ni-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; 4 - TF5-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: 1-2X1 2-2X2 4-2X4 5-2X5 6-2X6 8-2X8 A-1X1 B-1X2 C-1X4 D-1X5 "E-1X8" T-1X8" U-USB(R,45) 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

Checked

Approved

MATERIAL

DESCRIPTION

BT G8-120

FIRST ANGLE PROJECTION



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

SCALE

1.8:1

UNIT

mm

MODEL NO.

B80020012011

REV.