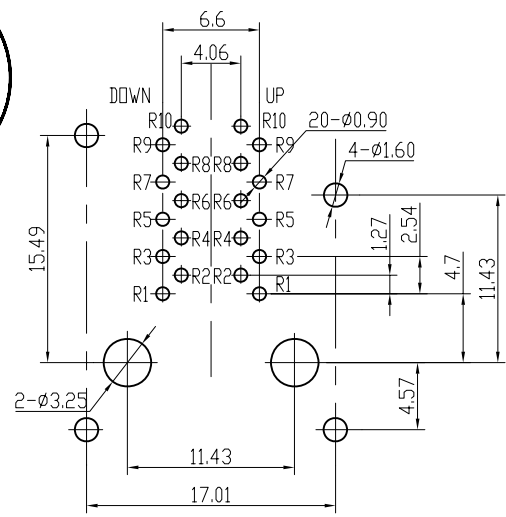
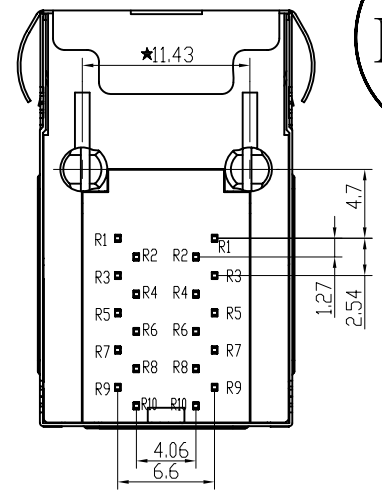
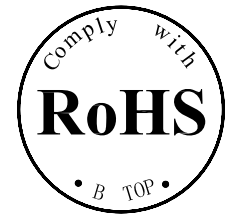


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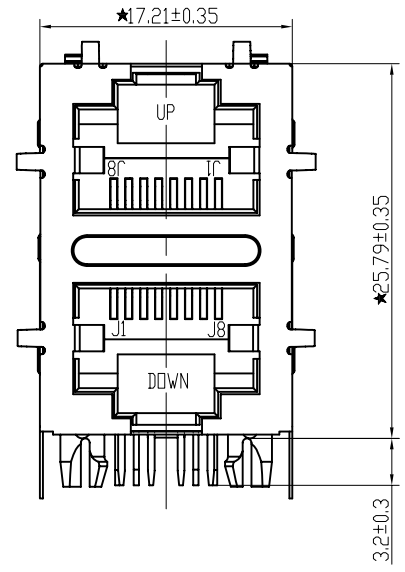
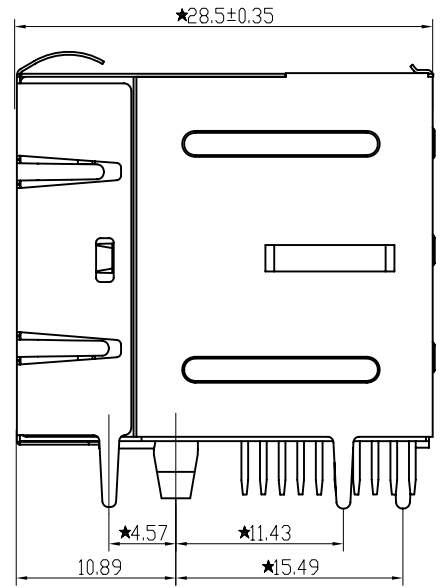
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PCB BOARD LAYOUT

Specification:

- 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	MATERIAL			DESCRIPTION	
Checked	SCALE			UNIT	MODEL NO.
Approved	2:1	mm			

B59(47-13)G8-180A-1023-C12(2X1 EMI 2.5KV)  
REV. V1.0

FIRST ANGLE PROJECTION

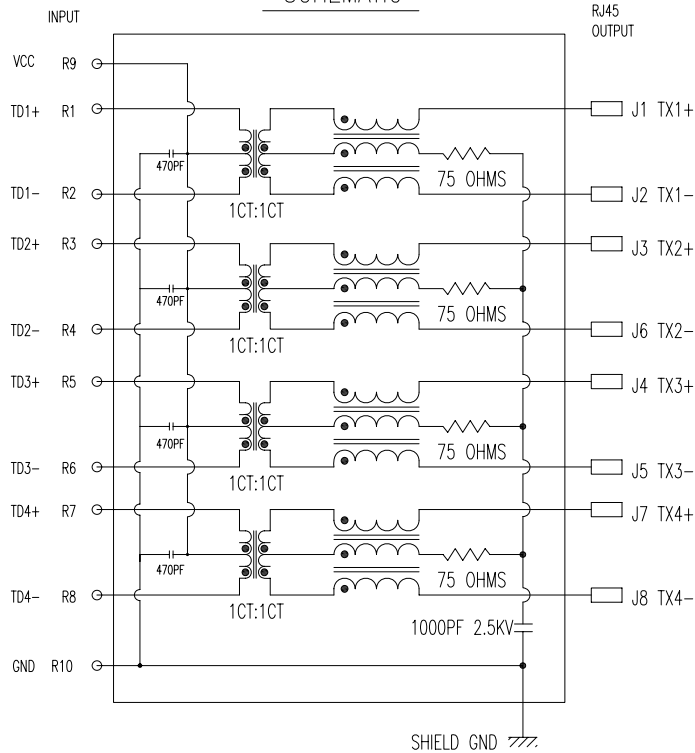
TEL: 0769-38926198  
FAX: 0769-38926199  
Website: www.BtopTech.cn  
www.BtopTech.com

20161031

1

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### SCHEMATIC



### 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% electricly tested for functionality per IEEE802.3 requirement  
 OCL:100KHz 100mV 8mA 350uH Min; TURNS RATIO:10KHz 1V TRD1/2/3/4 1CT:1CT ±2%  
 HI-POT:IN PUT TO OUT PUT 2250V DC 60Sec; OUT PUT TO SHIELD 2250V DC 60Sec  
 RoHS peak wave solder temperature rating 260°C 5sec

**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 ;BOTTOM LAYER NICKEL (30-50μ\*)  
 BETWEEN RIGHT TIN(60-120μ\*);OVER SELECTIVE GOLD PLATING  
 GOLD PLATING: 3μ", 6μ", 15μ", 30μ", 50μ"  
 Signal pin: 0.4\*0.4 THICKNESS COPPER ALLOY WITH BOTTOM LAYER NI 30~50U" OVER BRIGHT TIN 60~120U"  
 SHIELDING: 0.2-0.24mm THICKNESS COPPER ALLOY WITH HALF BRIGHT NICKEL(50-100μ\*) 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: RIBS for switches  
**Family code (sequence id):1-99**  
 Type of product code: G: Gigabit RJ45 transformer; F: 100Base RJ45 transformer; V: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) 1-4 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 shrapnet; 2 - shiekling 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 port: 1-2X1 2-2X2 4-2X4 5-2X5 6-2X6 8-2X8 A-1X1 8-1X2 C-1X4 D-1X5 " E-1X6 1-1X8 U-(USB+RJ45) P-TAB UP1X1 1-H-TAB UP1X2 K-TAB UP1X4"

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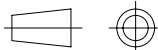
Designed  
 Checked  
 Approved

MATERIAL

DESCRIPTION

G8-180A 2.5KV

FIRST ANGLE PROJECTION



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

SCALE

1.8:1

UNIT

mm

MODEL NO.

B80020018011

REV.