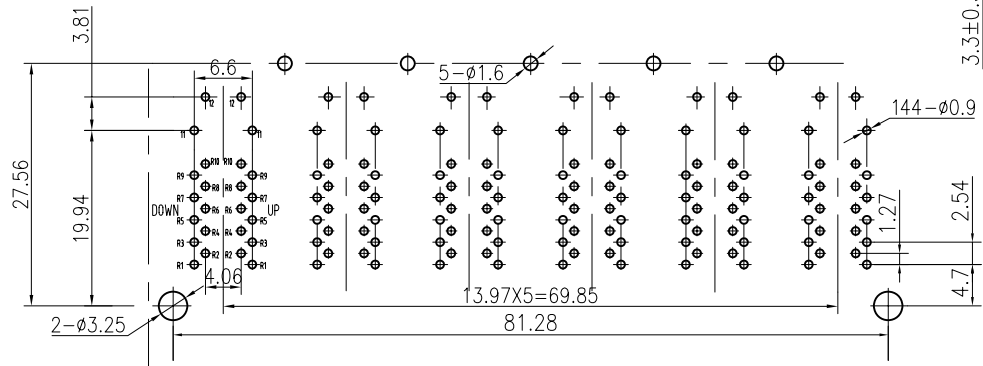
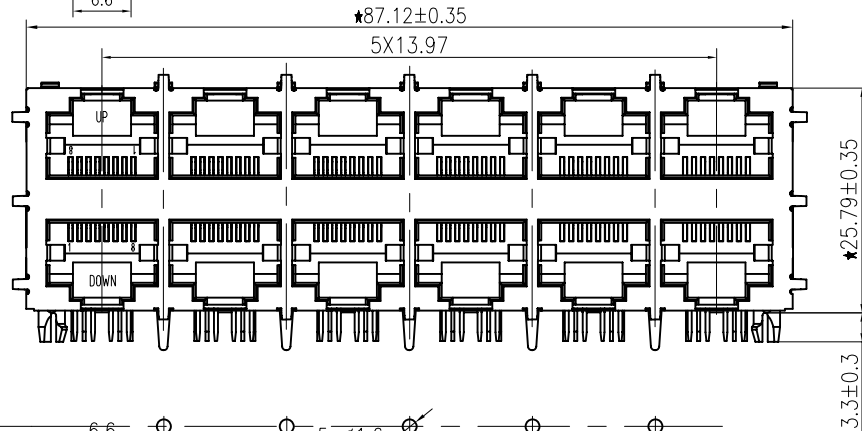
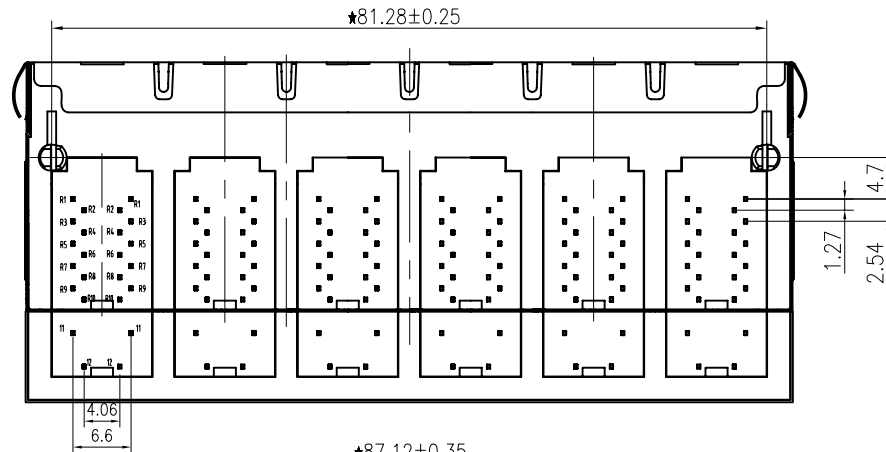


Specification:

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.



PCB BOARD LAYOUT

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

Designed

MATERIAL

DESCRIPTION

B59(169-21)GP8-14-9-6023-C12(2X6 EMI POE两边无脚)

Checked

SCALE

1:2:1

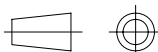
UNIT

mm

MODEL NO.

REV.

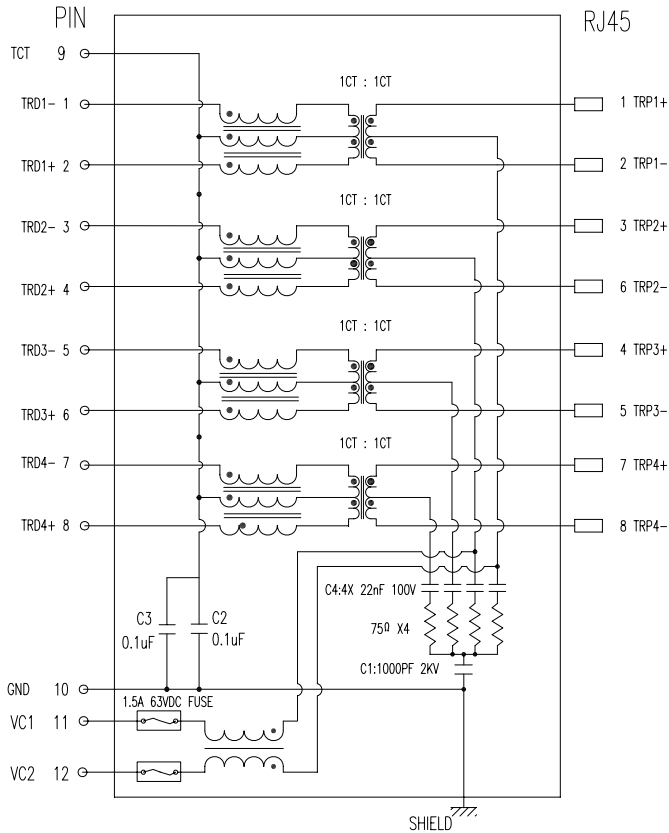
FIRST ANGLE  
PROJECTION



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

1

2



### 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°C  
 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)  
 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

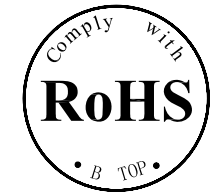
RETENTION STRENGTH: 7.7Kgs BETWEEN JACK AND PLUG  
 DURABILITY: 750 MATING CYCLES Mini

**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: -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



**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: RBS 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-1X6 F-1X8 U-(USB+RJ45) P-TAB UP1X1 H-TAB UP1X2 K-TAB UP1X4

A

A

B

B

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

Designed

Checked

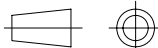
Approved

MATERIAL

DESCRIPTION

BT GP8-149

FIRST ANGLE PROJECTION



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

SCALE

1.8:1

UNIT

mm

MODEL NO.

B80020014911

REV.