

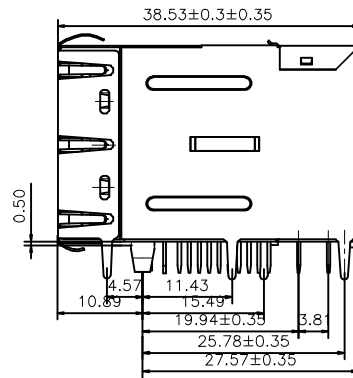
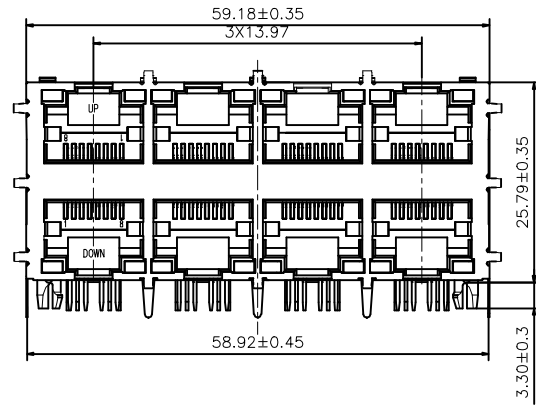


DESCRIPTION:
 RJ45 With internal Magnetics Connector
 Designed to support such applications as: Ethernet Equipment Complex, Switches, Routers, Firewalls, Servers and Hub
 Internal magnetics are 100% electrically tested for functionality per IEEE802.3af/at requirement

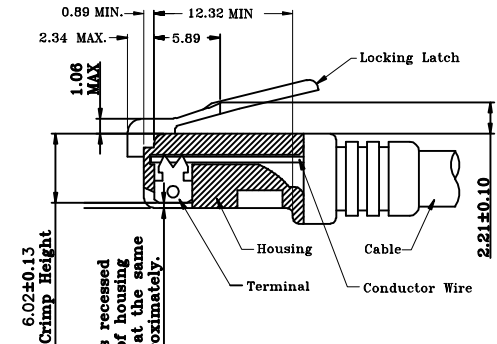
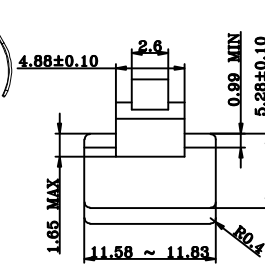
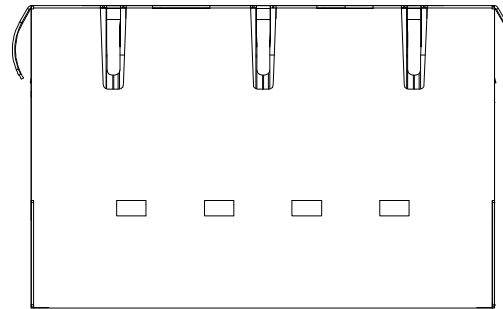
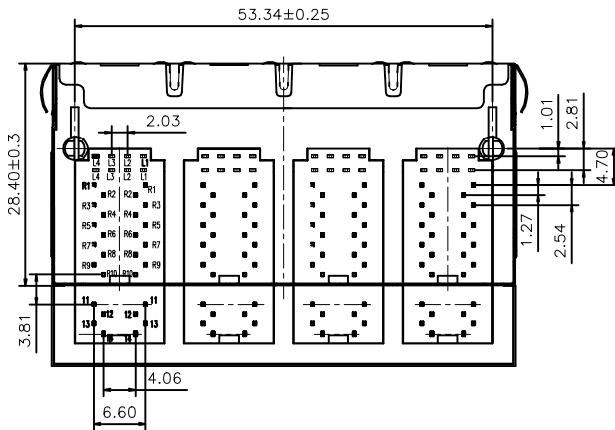
ELECTRICAL:
 RoHS peak wave solder temperature rating 235°C
 High performance for maximum EMI suppression
 JACK CAVITY CONFORMS TO FCC RULES AND REGULATIONS, PART 68 SUBPART F.
INSERTION FORCE: 2 CONTACTS----350g 4 CONTACTS----500g
 6 CONTACTS----750g 8 CONTACTS----900g
 10 CONTACTS----1050g

MECHANICAL:
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;
GOLD PLATING: 3μ#, 6μ#, 15μ#, 30μ#, 50μ#
WORKING TEMPERATURE: -20°C~70°C



1.Recommend Plug Dim



All contacts recessed below top of housing and must be at the same height approximately.

All dimensions follow :
 FCC subpart F, 68,500, Figure (C)(2)(i)
 IEC 60603-7
 STANDARD MODULAR PLUG ASSEMBLY

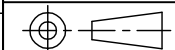
NOTES : 1. Tolerance : PCB ±0.05mm
 Connector ±0.25mm
 2. Connector dimensions comply with FCC 68.5 dimension requirements

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

TITLE: B59(127-02)SP8-205-4323-C12

PART NO.: 2X4Port 2.5G BASE-T PoE+ W/ SHELL W/ LED

DIM.	TOL.
X	±0.30
X.X	±0.20
X.XX	±0.15
X.XXX	±0.10
GENERAL ANGLE: ±3°	



UNIT:	mm
SCALE:	1:1
SHEET:	1 of 2
DWG. SIZE:	A4
LAYER:	XXXX

WEBSITE: WWW.BTOPTECH.COM
 WWW.BTOPTECH.CN
 TEL: 0769-38928198
 FAX: 0769-38928199

DRAWN:
 CHECKED:
 APPROVED:

REV.	DESCRIPTION	ECN NO.	NAME	DATE
XA	NEW RELEASE	xxxx	Jason	2018-May-24

REVISIONS

Meets or exceeds IEEE 802.3 standard for 2.5G Base-T
 120 uH minimum OCL with 11mA DC bias current
 Available with or without LEDs
 Minimum 1500Vrms isolation per IEEE802.3 requirement
 DC Current/Voltage Rating-PoE+: 720mA MAX @54VDC(Continuous)
 Operating temperature 0°C to +70°C
 Storage temperature -40°C to +85°C

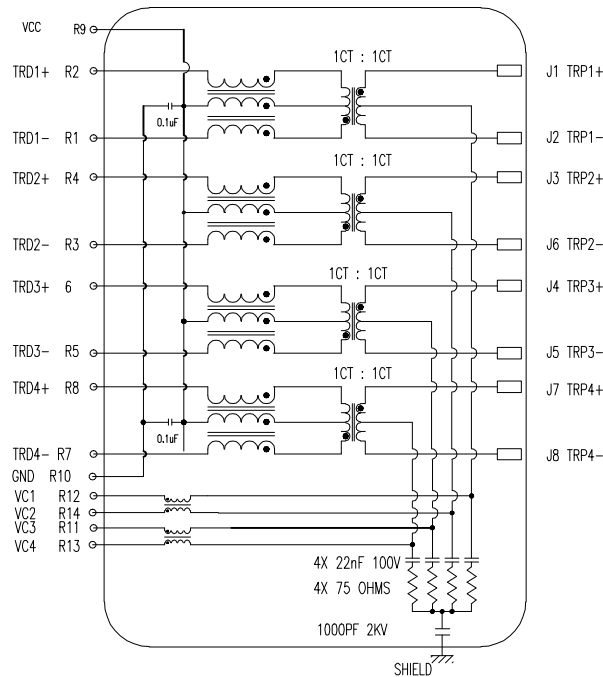
2.TRANSFORMER ELECTRICAL SPECIFICATIONS AT 25°C;

Insertion Loss (dB max.)			Return Loss (dB min.)				C.M.R. (dB min.)	Hi - pot (Vrms)
1-40 MHz	40-125 MHz	125-250 MHz	1-40 MHz	40-80 MHz	100-125 MHz	125-250 MHz	1-250 MHz	60Hz/1min.
-0.8	-1.2	-3.0	-16	-14	-12	-8	-40	1500

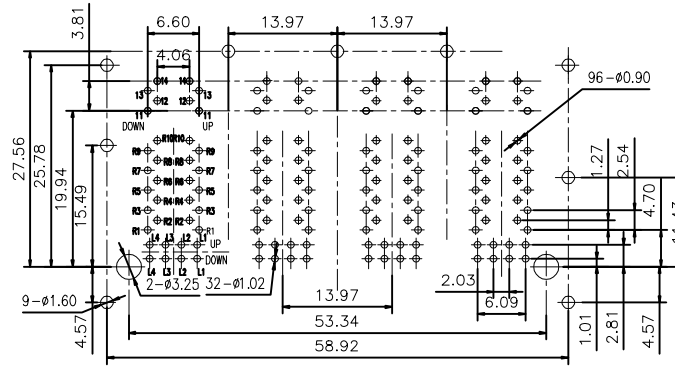
3.SCHEMATIC:

PHY Side

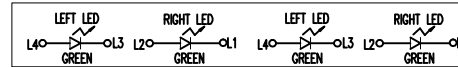
Cable Side



4.Pin Assignment For PCB Layout



Suggested PCB Pad Layout
 Component Side View



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

5.ORDER INFORMATION

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/56/57/58: 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;
 98: RHS 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 ,
 S: 5GB RJ45 transformer
 T: 10GB RJ45 transformer

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- 7μ ; 2- 3μ ; 3- 6μ ; 4- 15μ ; 5- 30μ ;
 6- 50μ ; 7-(Ni- 50μ , Sn- $60-120\mu$).

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

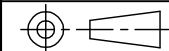
Products outport:
 1-2X1, 2-2X2, 4-2X4, 5-2X5, 6-2X6, 8-2X8, A-1X1,
 B-1X2, C-1X4, D-1X5, E-1X6, T-1X8, U-(USB+RJ45), P-TAB
 UP1X1, H-TAB UP1X2, K-TAB UP1X4.

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 LAYER: XXXX

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