

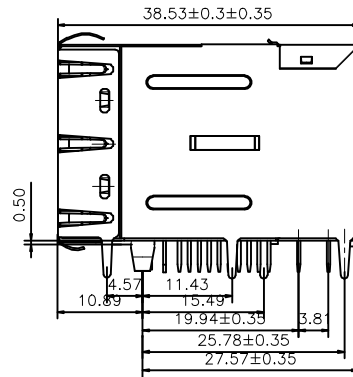
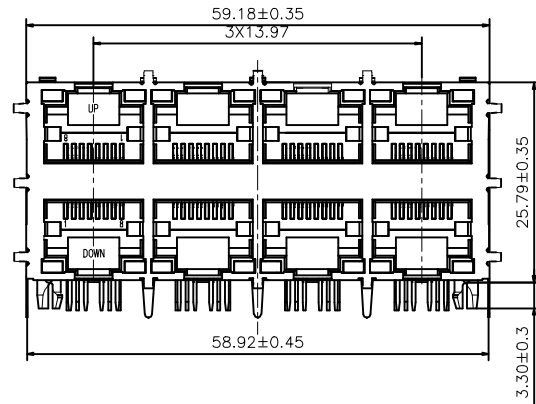


DESCRIPTION:
 RJ45 With internal Magnetics Connector
 Designed to support such applications as: Ethernet Equipment Complex, Switches, Routers, Firewalls, Servers and Hub
 Internal magnetics are 100% electrically tested for functionality per IEEE802.3af/at requirement

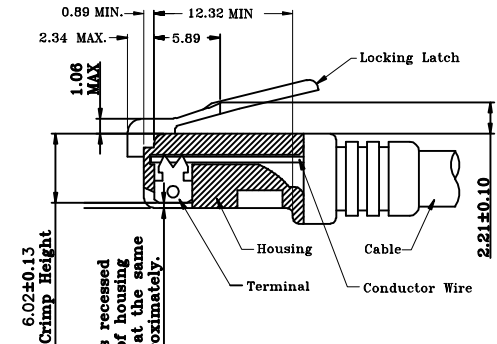
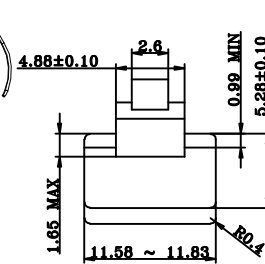
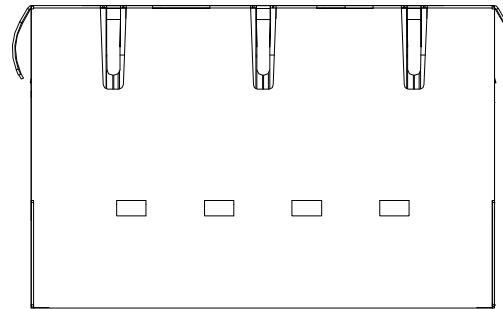
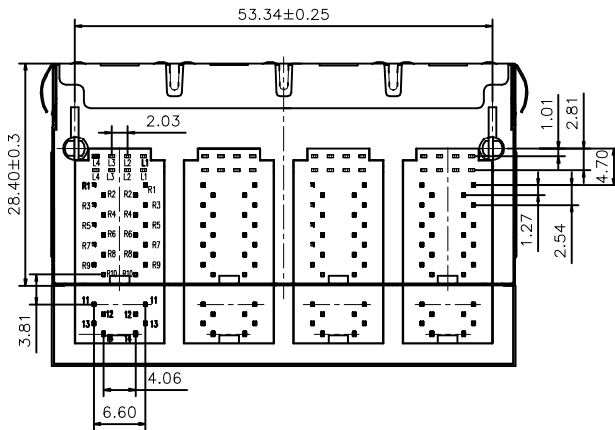
ELECTRICAL:
 RoHS peak wave solder temperature rating 235°C
 High performance for maximum EMI suppression
 JACK CAVITY CONFORMS TO FCC RULES AND REGULATIONS, PART 68 SUBPART F.
INSERTION FORCE: 2 CONTACTS----350g 4 CONTACTS----500g
 6 CONTACTS----750g 8 CONTACTS----900g
 10 CONTACTS----1050g

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

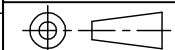
NOTES : 1. Tolerance : PCB ±0.05mm
 Connector ±0.25mm
 2. Connector dimensions comply with FCC 68.5 dimension requirements

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

TITLE: B59(127-03)SP8-225-4625-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

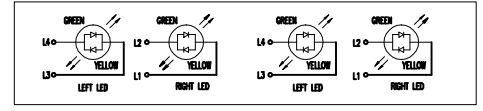
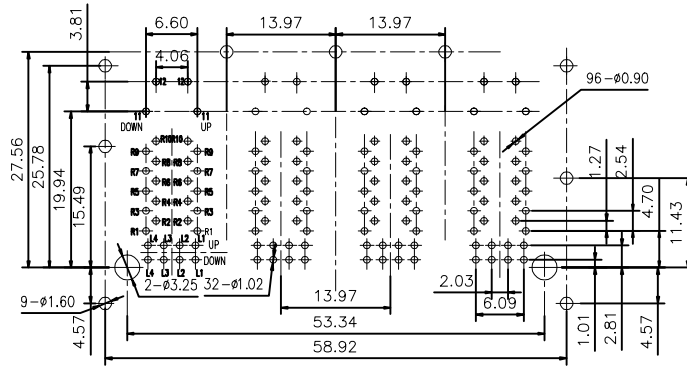
DRAWN:
 CHECKED:
 APPROVED:

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
 180 uH minimum OCL with 8mA DC bias current
 Available with or without LEDs
 Minimum 1500Vrms isolation per IEEE802.3 requirement
 DC Current/Voltage Rating-PoE+: 720mA MAX @57VDC(Continuous)
 Operating temperature -40°C to +85°C
 Storage temperature -40°C to +85°C

4.Pin Assignment For PCB Layout

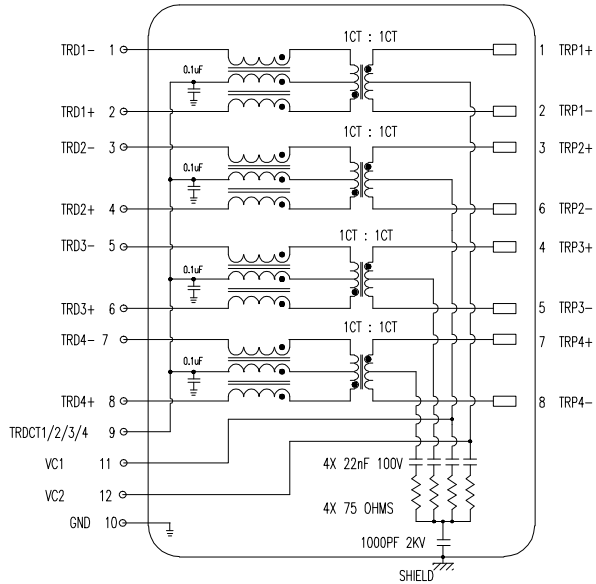


2.TRANSFORMER ELECTRICAL SPECIFICATIONS AT 25°C;

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



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- 5μ ; 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;

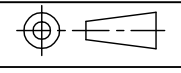
Products luminous definition:
 0- No LED; 1-Left Yellow Right Green; 2- Left Green Right Yellow; 3- Double Green; 4- Double Yellow; 5- LED straight for the pin; 6- A special definition; 7- Single linear LEDs

Products output:
 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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REVISIONS