

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 FCC 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

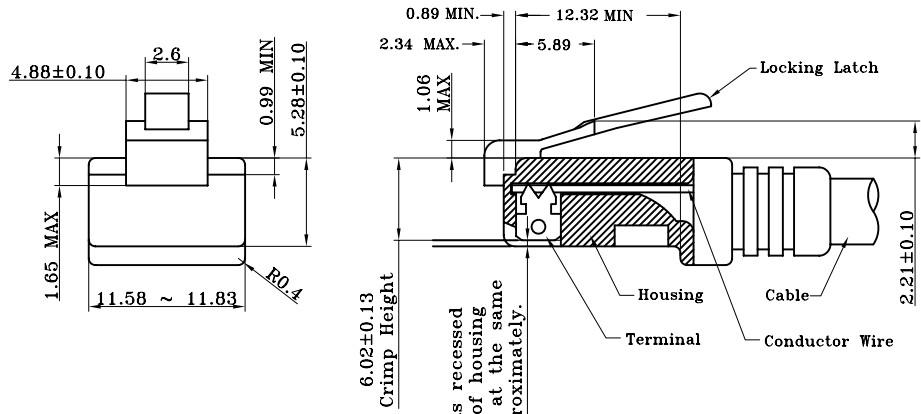
MECHANICAL:
 RETENTION STRENGTH: 7.7Kgs BETWEEN JACK AND PLUG
 DURABILITY: 750 MATING CYCLES Mini

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
 TOLERANCES UNLESS OTHERWISE SPECIFIED :
 0?10±0.15?10?20±0.2?20?40±0.25?40?70±0.3?≥70±0.4

1.Recommend Plug Dim



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

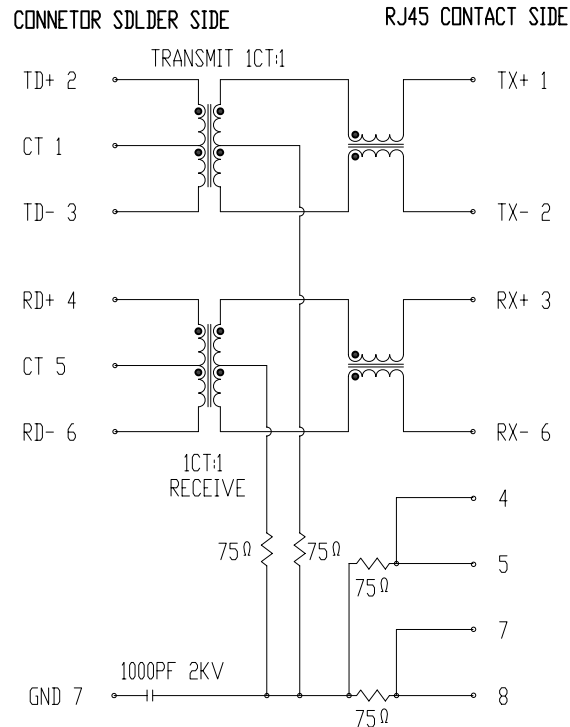
B-TOP® 东莞市博腾电子科技有限公司 Dongguan BroadTop Electronic Technology Co., Ltd.		Designed	MATERIAL		DESCRIPTION		B59(59-16)F4-233-1012-C12(无灯无弹)	
Checked		Approved		SCALE	2:1	UNIT	mm	MODEL NO.
FIRST ANGLE PROJECTION		TEL: 0769-38926198 FAX: 0769-38926199 Website: www.BtopTech.cn www.BtopTech.com					REV. V1.1	

Meets or exceeds IEEE 802.3 standard for 10/100/1000 Base-TX
 350 uH minimum OCL with 8mA DC bias current
 Available with or without LEDs
 Minimum 1500Vrms isolation per IEEE802.3 requirement
 Operating temperature -40°C to +85°C
 Storage temperature -40°C to +85°C

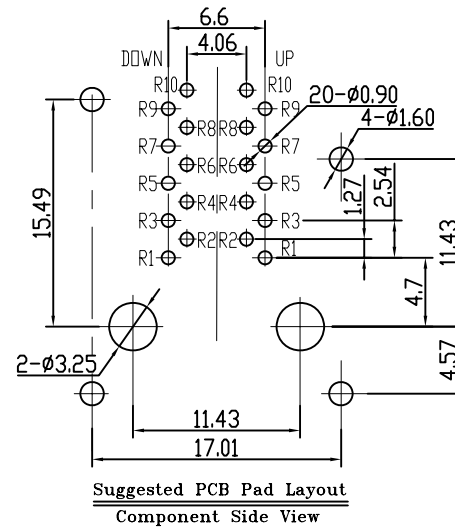
2. TRANSFORMER ELECTRICAL SPECIFICATIONS AT 25°C;

Insertion Loss (dB max.)	Return Loss (dB min.)			Cross talk (dB min.)			C.M.R. (dB min.)		Hi - pot (Vrms)
1-100MHz	1-30 MHz	30-60 MHz	60-80 MHz	1-30 MHz	30-60 MHz	60-100 MHz	10-60 MHz	60-100 MHz	60Hz/1min.
-1.0	-18	-16	-12	-40	-35	-30	-40	-30	1500

3. SCHEMATIC:



4. Pin Assignment For PCB Layout



5. ORDER INFORMATION

"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; X: that strip line series;
 49: Conversion and 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: 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

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-PAV, 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- 2μ ?; 2- 3μ ?; 3- 6μ ?; 4- 15μ ?; 5- 30μ ?; 6- 50μ ?
 ; 7-(Ni- 50μ ? Sn- $80-120\mu$?)

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?
 1-2X112-2X274-2X475-2X576-2X678-2X879A-1X1? B-1X2?
 C-1X479-1X378-1X677-1X871-(USB+RJ45)?P-TAB UP1X1?
 H-TAB UP1X2?K-TAB UP1X4?

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2019-04-09

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