

**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

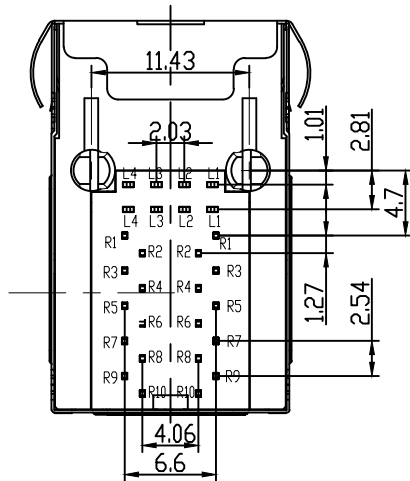
**ELECTRICAL:**  
RoHS peak wave solder temperature rating 235°C  
High performance for maximum EMI suppression  
JACK CAVITY CONFORMS TO FCC RULES AND REGULATIONS,PART 68 SUBPART F.

**INSERTION FORCE:** 2 CONTACTS----350g 4 CONTACTS----500g  
6 CONTACTS----750g 8 CONTACTS----900g  
10 CONTACTS----1050g

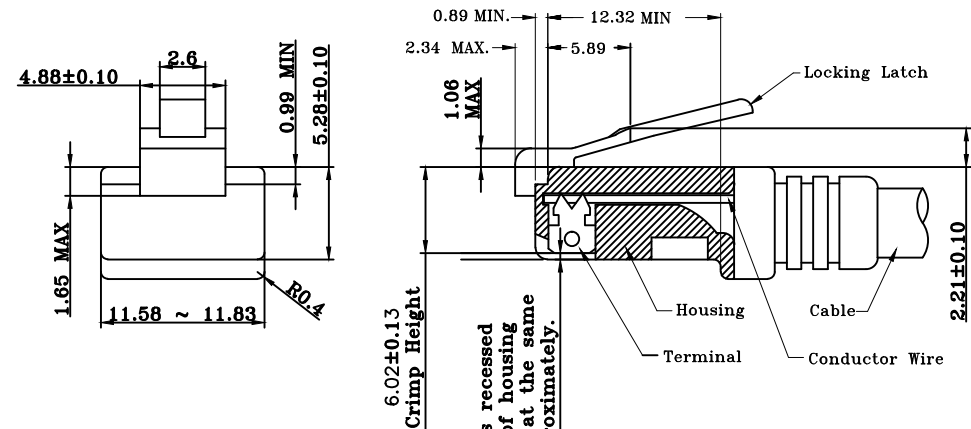
**MECHANICAL:**  
RETENTION STRENGTH: 7.7Kgs BETWEEN JACK AND PLUG  
DURABILITY: 750 MATING CYCLES Mini  
HOUSING: 1) GLASS FILLED PA66 (UL 94V-0)  
2) GLASS FILLED PA46/LCP (UL 94V-0)  
3) GLASS FILLED PBT (UL 94V-0)

**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"  
**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



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



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

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

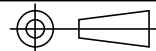
**DIM. TOL.**  
X ±0.30  
X.X ±0.20  
X.XX ±0.15  
X.XXX ±0.10  
**GENERAL ANGLE:**  
±3°

**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:**

**TITLE:** B59(57-110)F4-03B-1223-C12  
**PART NO.:** 10/100BASE 2X1Port W/ SHELL W/ LED (-40°C~+85°C)



XA	NEW RELEASE	xxxx	Jason	2018-Jun-06
REV.	DESCRIPTION	ECN NO.	NAME	DATE

REVISIONS

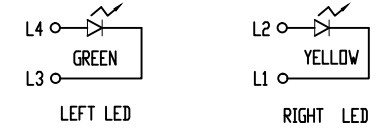
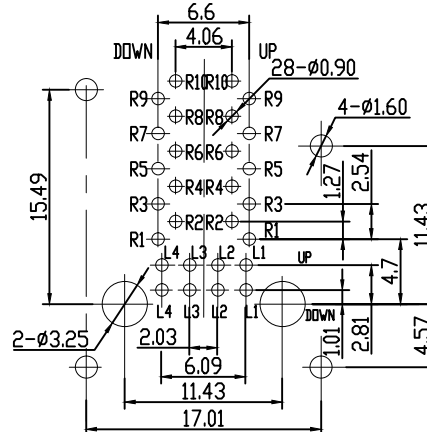
Meets or exceeds IEEE 802.3 standard for 10/100Base-T  
 350 uH minimum OCL with 8mA DC bias current  
 Available with or without LEDs  
 Minimum 1500Vrms isolation per IEEE802.3 requirement  
 Operating temperature -40°C to +85°C  
 Storage temperature -40°C to +85°C

### 4.Pin Assignment For PCB Layout



### 2.TRANSFORMER ELECTRICAL SPECIFICATIONS AT 25°C;

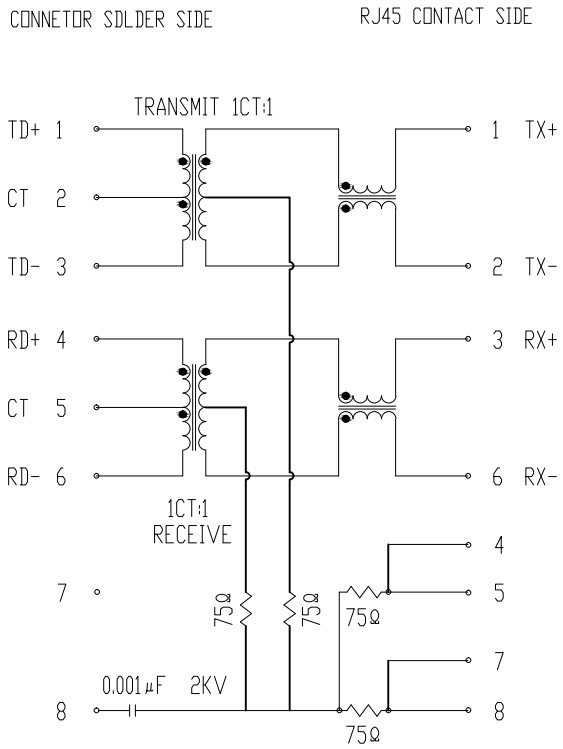
Insertion Loss (dB max.)	Return Loss (dB min.)			Cross talk (dB min.)			C.M.R. (dB min.)		Hi - pot ( Vrms )
	1-30 MHz	30-60 MHz	60-80 MHz	1-30 MHz	30-60 MHz	60-100 MHz	10-60 MHz	60-100 MHz	
1-100MHz	-18	-16	-12	-40	-35	-30	-40	-30	60Hz/1min.
-1.0	-18	-16	-12	-40	-35	-30	-40	-30	1500



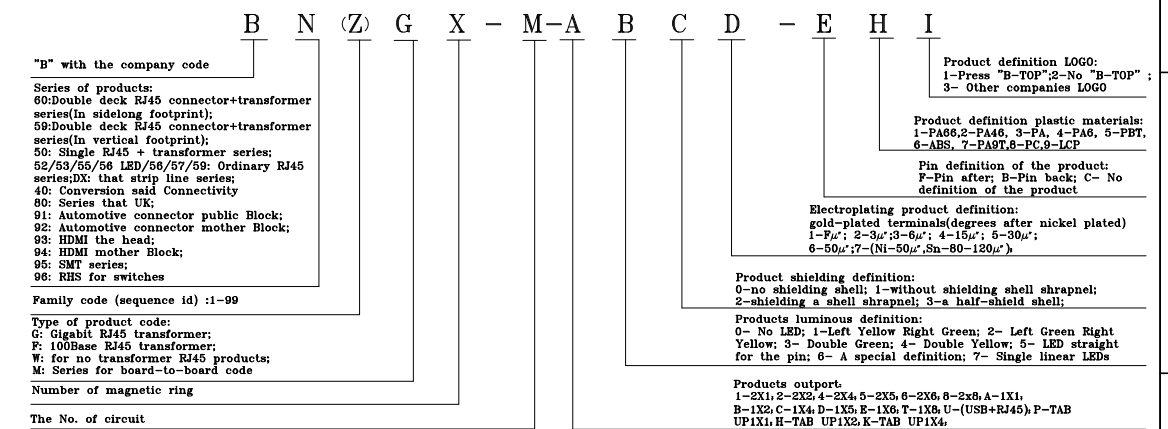
Standard LED Color	Wavelength	Forward (V MAX)	Typical (V TYP)	Luminous Intensity
Green	560-580nm	2.5V	2.1-2.2V	9-25MCD
Yellow	580-610nm	2.5V	2.1-2.2V	9-30MCD

LED Specification

### 3.SCHEMATIC:



### 5.ORDER INFORMATION



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

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 X.XX ±0.15  
 X.XXX ±0.10  
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