

**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

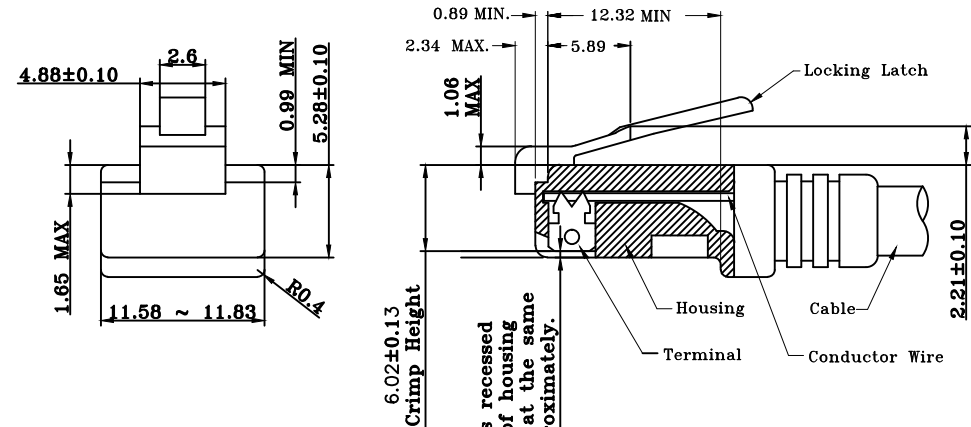
**ELECTRICAL:**  
 RoHS peak wave solder temperature rating 235°C  
 High performance for maximum EMI suppression  
 JACK CAVITY CONFORMS TO FCC RULES AND REGULATIONS,PART 68 SUBPART F.

**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



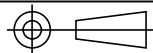
All dimensions follow :  
 FCC subpart F, 68,500, Figure (C)(2)(i)  
 IEC 60603-7

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  
 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
TEL:	0769-38928198
FAX:	0769-38928199
DRAWN:	
CHECKED:	
APPROVED:	

TITLE:	B59(46-123)GP8-254-1223-C12
PART NO.:	2X1Port 10/100/1000 BASE-T PoE W/ SHELL W/ LED

XA	NEW RELEASE	xxxx	Jason	2019-May-06
REV.	DESCRIPTION	ECN NO.	NAME	DATE

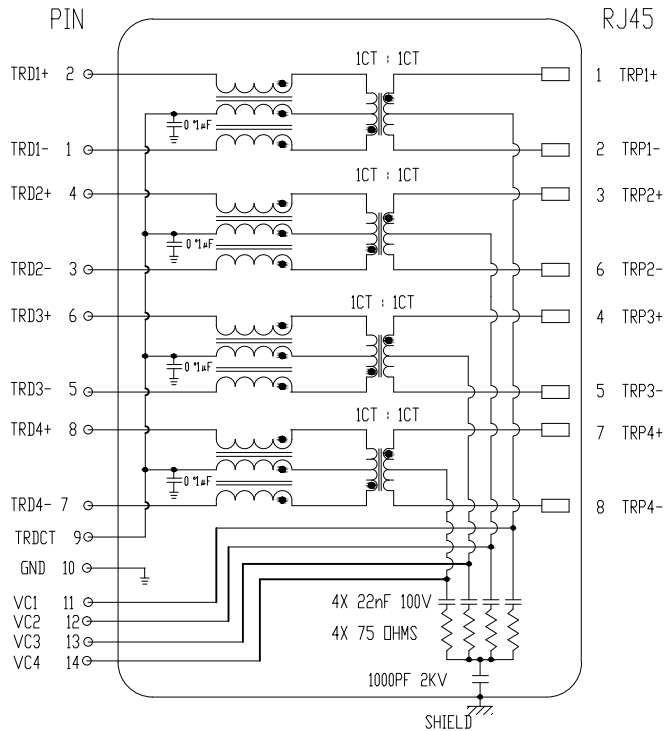
REVISIONS

Meets or exceeds IEEE 802.3 standard for 10/100/1000 Base-T  
 350 uH minimum OCL with 8mA DC bias current  
 Available with or without LEDs  
 Minimum 1500Vrms isolation per IEEE802.3 requirement  
 PoE rating: 720mA MAX @57VDC continuous  
 Operating temperature -40°C to +85°C  
 Storage temperature -40°C to +85°C

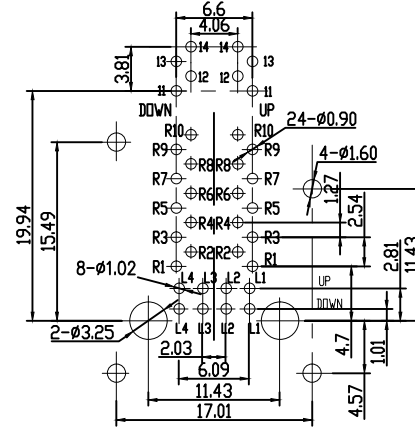
2.TRANSFORMER ELECTRICAL SPECIFICATIONS AT 25°C;

Insertion Loss (dB max.)	Return Loss (dB min.)				Cross talk (dB min.)			C.M.R. (dB min.)		Hi - pot ( Vrms )
1-125MHz	1-30 MHz	30-60 MHz	60-80 MHz	80-100 MHz	1-30 MHz	30-60 MHz	60-100 MHz	10-60 MHz	60-100 MHz	60Hz/1min.
-1.2	-18	-16	-12	-10	-40	-35	-30	-40	-30	1500

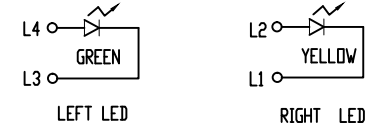
3.SCHEMATIC:



4.Pin Assignment For PCB Layout



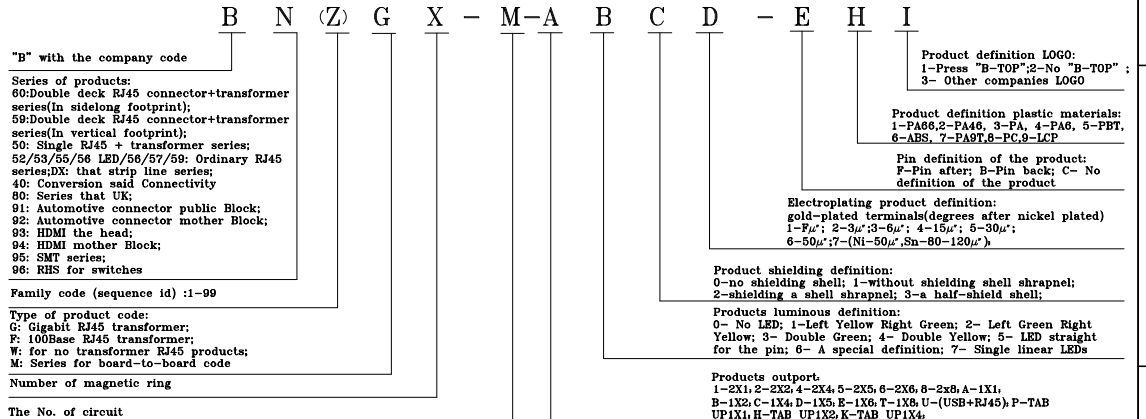
Suggested PCB Pad Layout  
 Component Side View



Standard LED Color	LED 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

5.ORDER INFORMATION



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 PART NO.: 2X1Port 10/100/1000 BASE-T PoE W/ SHELL W/ LED

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

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

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REVISIONS