

**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         |

1. LED intensity/wavelength measured with Photo Research PR-650 Colormeter
2. With a forward current of 20 mA, Absolute Maximum Ratings (Ta=25°C)

- 1: TOLERANCES UNLESS OTHERWISE SPECIFIED :
- 0~10±0.15, 10~20±0.2, 20~40±0.25, 40~70±0.3, >70±0.4
- 2: JACK CAVITY CONFORMS TO FCC RULES AND REGULATIONS, PART 68 SUBPART F.

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Designed: Checked: Approved:

MATERIAL: SCALE: 2:1 UNIT: mm MODEL NO.

DESCRIPTION: B59(57-02)F4-03A-1212-C12(2X1 G-Y LED)

REV: V1.1

### DESCRIPTION

**ELECTRICAL:** RJ45 With internal Magnetics Connector

Design to support such applications as: Ethernet Equipment Complex, Switches, Routers, Firewalls, Servers and Hub Internal magnetics are 100% electrically tested for functionality per IEEE802.3 requirement  
OCL: 100KHz-100mV 8mA 350uH Min; TURNS RATIO: 10KHz 1V TRD1/2/3/4 1CT:1CT ±2%  
HI-POT: IN PUT TO OUT PUT 2250V DC 60Sec; OUT PUT TO SHIELD 2250V DC 60Sec  
RoHS peak wave solder temperature rating 260°C 5sec

**MECHANICAL:** JACK CAVITY CONFORMS TO FCC RULES AND REGULATIONS, PART 68 SUBPART F.

**INSERTION FORCE:** 8 CONTACTS--900g, 10 CONTACTS--1050g  
**RETENTION STRENGTH:** 7.7Kgs BETWEEN JACK AND PLUG  
**DURABILITY:** 750 MATING CYCLES Mini

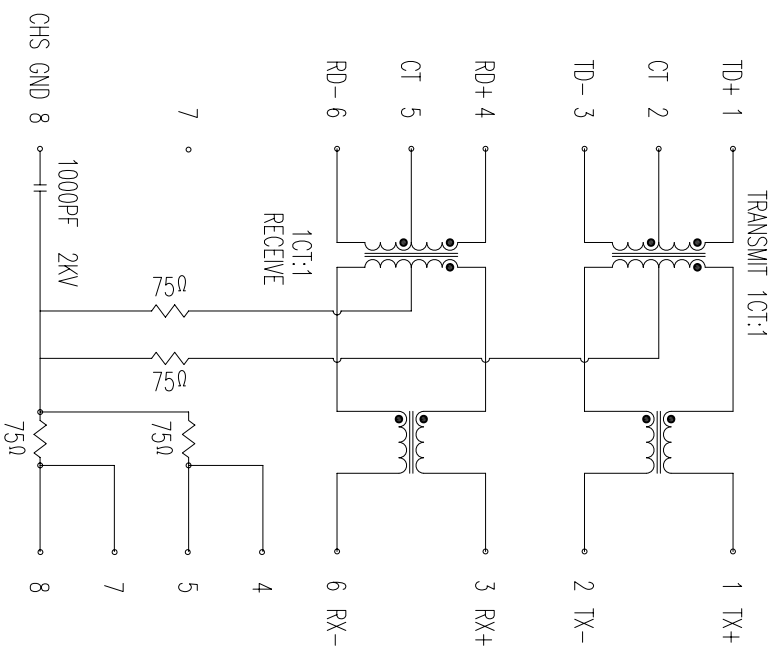
**MATERIAL:**  
**HOUSING:** 1) GLASS FILLED PA66 (UL 94V-0)  
2) GLASS FILLED PA46/PA6T/PA9T/LCP(265°C) (UL 94V-0)  
3) GLASS FILLED PBT/PA/ABS/PC (UL 94V-0)

**SPRING WIRE:** 0.25-0.35mm THICKNESS PHOSPHOR BRONZE ALLOY ;BOTTOM LAYER NICKEL (30-50%)  
**BETWEEN RIGHT TIN(60-120%) ;OVER SELECTIVE GOLD PLATING**

**GOLD PLATING:** 3µm, 6µm, 15µm, 30µm, 50µm

**Signal pin:** 0.4\*0.4 THICKNESS COPPER ALLOY WITH BOTTOM LAYER IN 30-50µm OVER BRIGHT TIN 60-120µm  
**SHIELDING:** 0.2-0.24mm THICKNESS COPPER ALLOY WITH HALF BRIGHT NICKEL (60-100%) PLATED

**Storage:** -40°C~85°C Relative Humidity<70%  
**Operating:** 0°C~+70°C



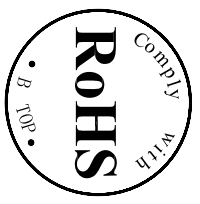
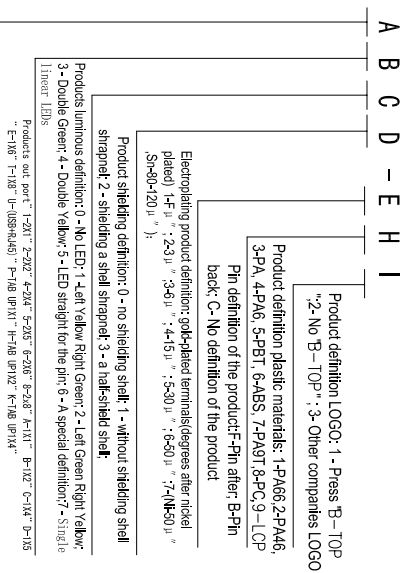
### ELECTRICAL SPECIFICATIONS AT 25°C

| Insertion Loss dB max | Return Loss dB min | Crosstalk (db TYP) | Common Mode Rejection (dB TYP) | Hypot(Vrms) |
|-----------------------|--------------------|--------------------|--------------------------------|-------------|
| 1-125MHz              | 1-30MHz            | 30-80MHz           | 1-100MHz                       | 1-100MHz    |
| -1.2                  | -18                | -18+20log(f/30MHz) | -30                            | -30         |

"g" with the company code  
Series of products: 60:Double deck RJ45 connector + transformer series(In shielding footprint); 59:Double deck RJ45 connector + transformer series(In vertical footprint); 58: Single RJ45 + transformer series; 52,53,55,56 LED; 57,59: Ordinary RJ45 series; 58: that strip line series; 40: Conversion said Connectivity 58: Series that UK; 91: Automotive connector mother Blocks; 92: Automotive connector mother Blocks; 93: IMH series; 96: IMH another Blocks; 98: SM series; 99: IMH for articles

**Family code (sequence id): 1-99**  
Type of product code: G: Gigabit RJ45 transformer; F: Induce RJ45 transformer  
After an transformer RJ45 products: M: Series for Market/Control code

**Number of magnetic ring**  
**The No. of circuit**



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| DESIGNED | DESCRIPTION                                | REV.      |
|----------|--|-----------|
| Checked  | MATERIAL                                   | BT F4-03A |
| Approved | SCALE 1.8:1 UNIT mm MODEL NO. B80010000311 |           |