

## FEATURES

- 1X1 Tab-UP, 1" Long RJ45 with internal magnetics
- 8 or 6-pin signal pin versions available
- Available with and without LEDs
- Suitable for CAT 5 & 6 Fast Ethernet Cable or better UTP
- Internal magnetics are 100% electrically tested for HI-POT and functionality
- 350  $\mu$ H minimum OCL with 8 mA bias current

## ELECTRICAL SPECIFICATIONS @25°C-Operating temperature 0°C TO 70°C

| Part Number    | Turns Ratio |         | LEDs  | Insertion Loss (dB TYP) | Return Loss (dB TYP)<br>100 $\Omega$ $\pm$ 15 $\Omega$ |          |           |           |           | Crosstalk (dB TYP) |           |            | Common Mode Rejection (dB TYP) |            | Hipot (Vrms)<br>@60Hz |
|----------------|-------------|---------|-------|-------------------------|--------------------------------------------------------|----------|-----------|-----------|-----------|--------------------|-----------|------------|--------------------------------|------------|-----------------------|
|                | TX          | RX      |       |                         | 1-65 MHz                                               | 1-10 MHz | 10-30 MHz | 30-60 MHz | 60-80 MHz | 1-30 MHz           | 30-60 MHz | 60-100 MHz | 1-50 MHz                       | 50-150 MHz |                       |
| RJ47- 01ND2    | 1CT:1       | 1CT:1CT | NONE  | -1.0                    | -1.0                                                   | -20      | -16       | -12       | -10       | -40                | -35       | -30        | -30                            | -20        | 1500                  |
| RJ47- 02YGD2   | 1CT:1CT     | 1CT:1CT | Y/G   | -1.0                    | -1.0                                                   | -20      | -16       | -12       | -10       | -40                | -35       | -30        | -30                            | -20        | 1500                  |
| RJ47- 03ND2    | 1CT:1       | 1CT:1CT | NONE  | -1.0                    | -1.0                                                   | -20      | -16       | -12       | -10       | -40                | -35       | -30        | -30                            | -20        | 1500                  |
| RJ47- 04GYDNW2 | 1CT:1       | 1CT:1   | G/Y   | -1.0                    | -1.0                                                   | -20      | -16       | -12       | -10       | -40                | -35       | -30        | -30                            | -20        | 1500                  |
| RJ47- 04ND2    | 1CT:1       | 1CT:1   | NONE  | -1.0                    | -1.0                                                   | -20      | -16       | -12       | -10       | -40                | -35       | -30        | -30                            | -20        | 1500                  |
| RJ47-05GYDNW2  | 1CT:1CT     | 1CT:1CT | G/Y   | -1.0                    | -1.0                                                   | -20      | -16       | -12       | -10       | -40                | -35       | -30        | -30                            | -20        | 1500                  |
| RJ47-05GYD2    | 1CT:1CT     | 1CT:1CT | G/Y   | -1.0                    | -1.0                                                   | -20      | -16       | -12       | -10       | -40                | -35       | -30        | -30                            | -20        | 1500                  |
| RJ47-06YGDNW2  | 1CT:1CT     | 1CT:1CT | Y/G   | -1.0                    | -1.0                                                   | -20      | -16       | -12       | -10       | -40                | -35       | -30        | -30                            | -20        | 1500                  |
| RJ47-06YGD2    | 1CT:1CT     | 1CT:1CT | Y/G   | -1.0                    | -1.0                                                   | -20      | -16       | -12       | -10       | -40                | -35       | -30        | -30                            | -20        | 1500                  |
| RJ47-06GGD2    | 1CT:1CT     | 1CT:1CT | G/G   | -1.0                    | -1.0                                                   | -20      | -16       | -12       | -10       | -40                | -35       | -30        | -30                            | -20        | 1500                  |
| RJ47-07NW2     | 1CT:1       | 1CT:1CT | NONE  | -1.0                    | -1.0                                                   | -20      | -16       | -12       | -10       | -40                | -35       | -30        | -30                            | -20        | 1500                  |
| RJ47-07GYDNW2  | 1CT:1       | 1CT:1CT | G/Y   | -1.0                    | -1.0                                                   | -20      | -16       | -12       | -10       | -40                | -35       | -30        | -30                            | -20        | 1500                  |
| RJ47-07YGD2    | 1CT:1       | 1CT:1CT | Y/G   | -1.0                    | -1.0                                                   | -20      | -16       | -12       | -10       | -40                | -35       | -30        | -30                            | -20        | 1500                  |
| RJ47-11GDD2    | 1CT:1       | 1CT:1   | G/O_G | -1.0                    | -1.0                                                   | -20      | -16       | -12       | -10       | -40                | -35       | -30        | -30                            | -20        | 1500                  |
| RJ47-12GDD2    | 1CT:1CT     | 1CT:1CT | G/O_G | -1.0                    | -1.0                                                   | -20      | -16       | -12       | -10       | -40                | -35       | -30        | -30                            | -20        | 1500                  |
| RJ47-13GDD2    | 1CT:1       | 1CT:1CT | G/O_G | -1.0                    | -1.0                                                   | -20      | -16       | -12       | -10       | -40                | -35       | -30        | -30                            | -20        | 1500                  |

## Part Number

RJ47 – XX GYD NW 2  
A B C D E

A: Series  
B: Schematics  
C: Led  
D: Mechanical  
E: Gold Plating: 1=3u", 2=6u", 3=15u", 4=30u", 5=50u"

## Mechanicals

### Housing Material:

MATERIAL:NYLON GF (Fr50) UL94V-0 STANDARD COLOR:BLACK

### Insert Material:

MATERIAL: Phos-Bronze C5210 EH--0.35mm Thickness

Insert -PBT GF UL94V-0

1.PLATING(1) NICKEL

2.PLATING(2) 100%Sn

3.PLATING(3) GOLD (3u" ~ 50u" )

### Plate Material:

PBT GF UL 94V-0

### Contact pin Material:

MATERIAL: Phos-Bronze C5210 EH--0.35mm Thickness

1.PLATING(1) NICKEL

2.PLATING(2) 100%Sn

### Shielding Material:

BRASS C2680 H.--0.25mm THICKNESS PLATING NICKEL

Operating Life: 750 Cycles MIN.

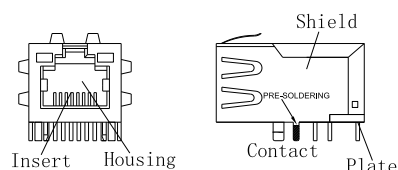
### Environmental

1. Storage Temp:-40°C TO +85°C.

2. Operating Temp: 0°C TO +70°C.

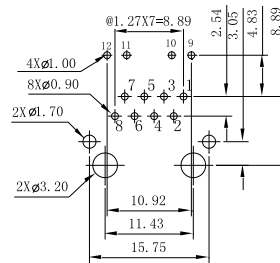
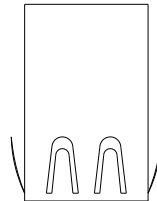
3.Wave Soldering Temperature:230 ~ 250°C(3 ~ 5 SECONDS)

4. MATES WITH MODULAR PLUG CONFORMING TO FCC PART 68 SUBPARTF.

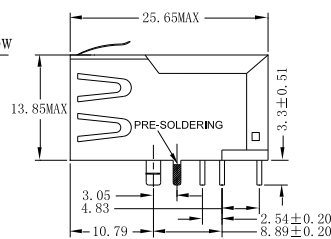
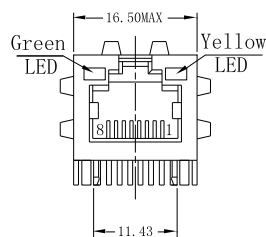


## Mechanicals And Dimensions

### 0X

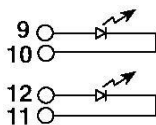


PC Board Layout  
Component Side Shown

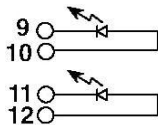


UNIT: mm Unless otherwise specified, all tolerances are  $\pm 0.25$

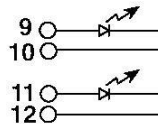
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2.



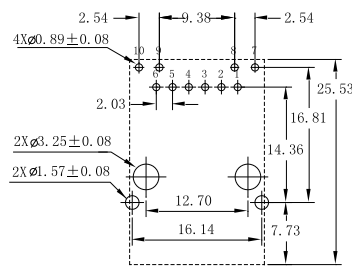
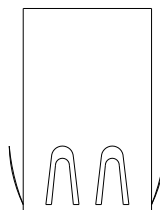
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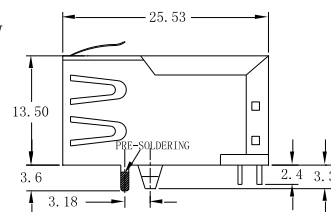
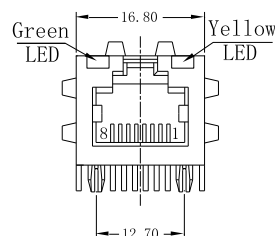
| Standard LED | Wavelength | Forward* V (MAX) | (TYP) |
|--------------|------------|------------------|-------|
| Yellow       | 585 nm     | 2.5 V            | 2.1 V |
| Green        | 565 nm     | 2.5 V            | 2.2 V |

\* With a forward current of 20 mA

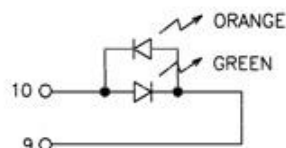
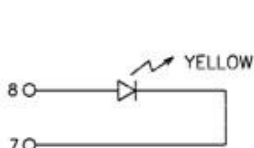
### 1X



PC Board Layout  
Component Side Shown



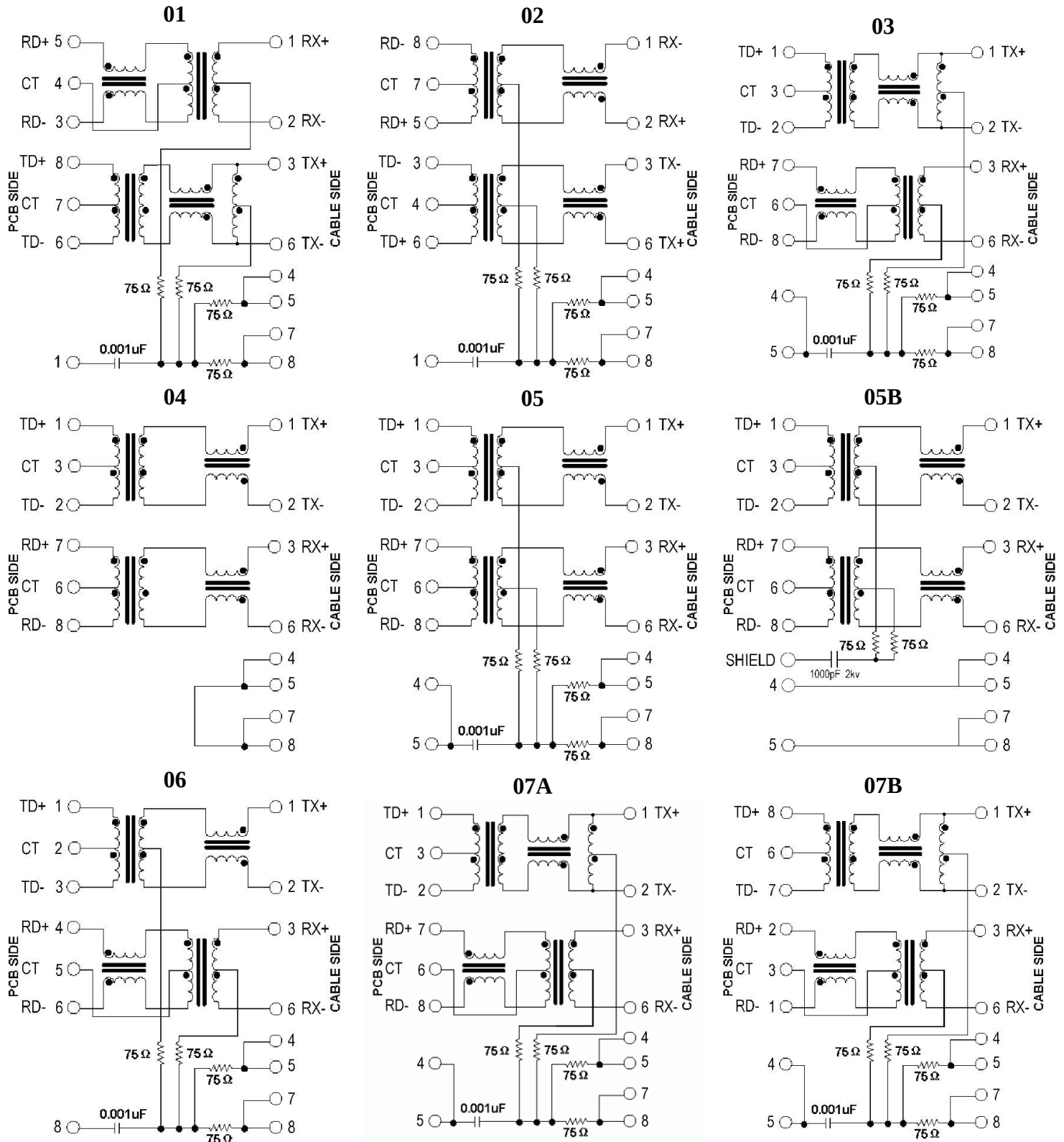
UNIT: mm Unless otherwise specified, all tolerances are  $\pm 0.25$



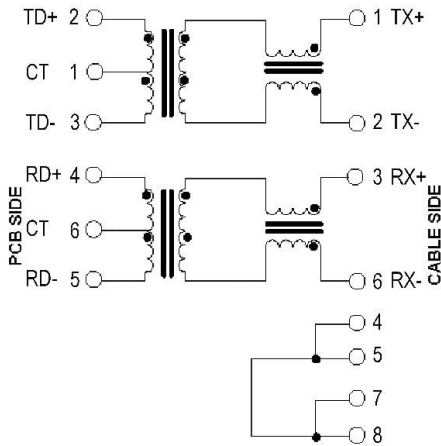
| Standard LED | Wavelength | Forward* V (MAX) | (TYP)       |
|--------------|------------|------------------|-------------|
| Yellow       | 585 nm     | 2.5 V            | 2.1 - 2.2 V |
| Green        | 565 nm     | 2.5 V            | 2.1 - 2.2 V |
| Orange       | 610 nm     | 2.5 V            | 2.1 - 2.2 V |

\* With a forward current of 20 mA

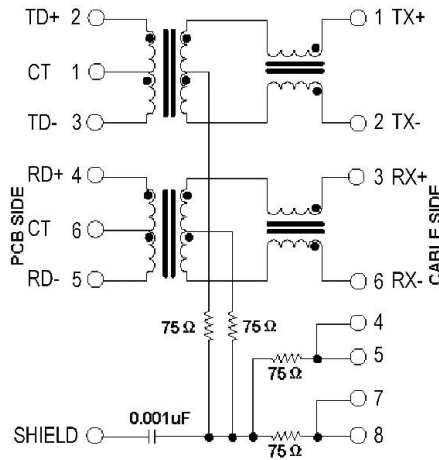
## SCHEMATICS



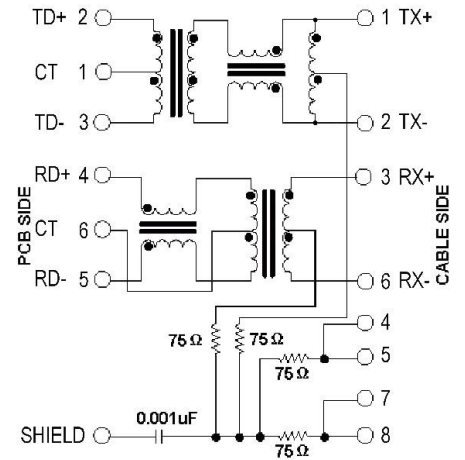
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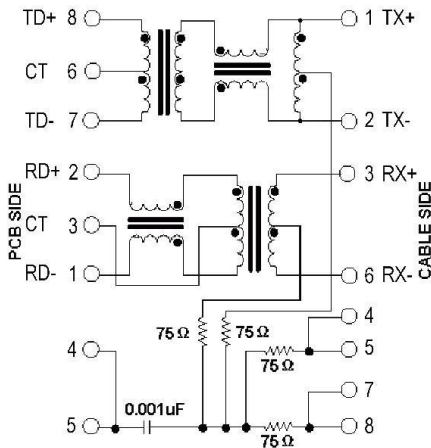
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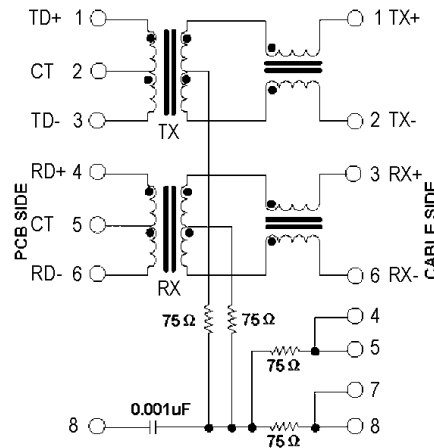
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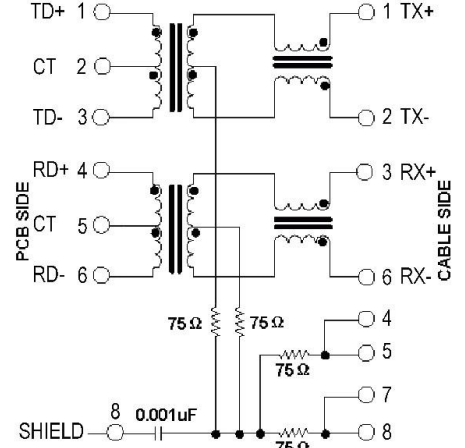
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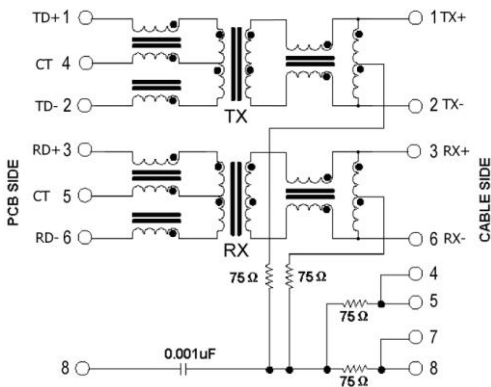
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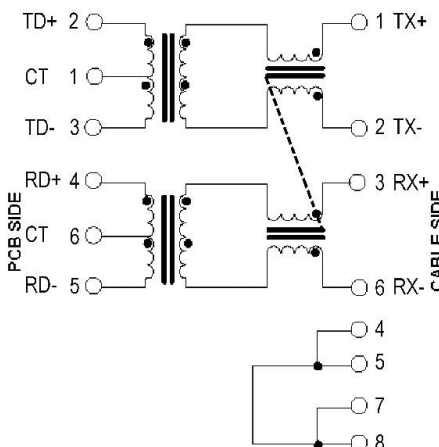
16



17



18



18A

