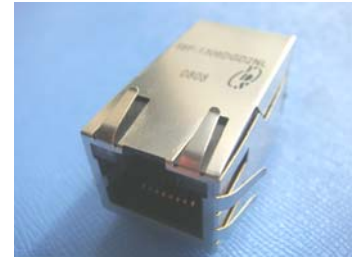




### FEATURES

- 1X1 Tab-UP, 1" Long RJ45 with internal magnetics
- 12pin 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
- Meets IEEE 802.3 specification



ELECTRICAL SPECIFICATIONS @25°C-Operating temperature 0°C TO 70°C													
Part Number	Turns Ratio( $\pm 5\%$ )	LEDs	Insertion Loss (dB MAX)	Return Loss (dB TYP) 100 $\Omega$ $\pm$ 15 $\Omega$				Crosstalk (dB TYP)			Common Mode Rejection (dB TYP)		Hipot (Vrms) @60Hz
		L/R	1-100 MHz	1-10 MHz	30 MHz	60-80 MHz	80-100 MHz	1-10 MHz	32-65 MHz	65-100 MHz	1-125 MHz	125-500 MHz	
56F-1301GYD	1CT:1CT	G/Y	-1.0	-20	-16	-12	-10	-40	-35	-30	-30	-20	1500
56F-1302GYD	1CT:1CT	G/Y	-1.0	-20	-16	-12	-10	-40	-35	-30	-30	-20	1500
56F-1303ND2	1CT:1	NONE	-1.0	-20	-16	-12	-10	-40	-35	-30	-30	-20	1500
56F-1304DGD	1CT:1CT	G_Y/G	-1.0	-20	-16	-12	-10	-40	-35	-30	-30	-20	1500
56F-1305GGD	1CT:1	G/G	-1.0	-20	-16	-12	-10	-40	-35	-30	-30	-20	1500
56F-1306DGD	1CT:1	G_Y/G	-1.0	-20	-16	-12	-10	-40	-35	-30	-30	-20	1500

ELECTRICAL SPECIFICATIONS @25°C-Operating temperature 0°C TO 70°C														
Part Number	Turns Ratio( $\pm 5\%$ )		LEDs	Insertion Loss (dB TYP)	Return Loss (dB TYP) 100 $\Omega$ $\pm$ 15 $\Omega$				Crosstalk (dB TYP)			Common Mode Rejection (dB TYP)		Hipot (Vrms) @60Hz
	TX	RX	L/R	1-100 MHz	1-10 MHz	30 MHz	60-80 MHz	1-10 MHz	30-60 MHz	60-100 MHz	1-50 MHz	50-130 MHz		
56F-1401GYD	1CT:1CT	1CT:1CT	G/Y	-1.0	-20	-16	-12	-40	-35	-30	-26	-20	1500	
56F-1402DGD	1CT:1CT	1CT:1CT	G_Y/G	-1.0	-20	-16	-12	-40	-35	-30	-26	-20	1500	
56F-1403ND2	1CT:1	1CT:1	NONE	-1.0	-20	-16	-12	-40	-35	-30	-26	-20	1000	
56F-1404DGD	1CT:1CT	1CT:1CT	G_Y/G	-1.0	-20	-16	-12	-40	-35	-30	-26	-20	1000	

### Part Number

56F - 1301 GYD 2 NL  
 A B C D E

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

### Mechanicals

#### Housing Material:

MATERIAL: PA66+30%GF UL94V-0 STANDARD COLOR:BLACK

#### Insert Material:

MATERIAL: QSn6.5-0.1---0.35mm Thickness

Insert -PBT GF UL94V-0

1.PLATING(1) NICKEL

2.PLATING(2) 100%Sn

3.PLATING(3) GOLD (6u " )

#### plug into Housing Material:

PBT+30%GF UL 94V-0

#### Contact pin Material:

MATERIAL: QSn6.5-0.1---0.35mm Thickness

1.PLATING(1) NICKEL

2.PLATING(2) 100%Sn

#### Shielding Material:

BRASS H65Y PLATING NICKEL

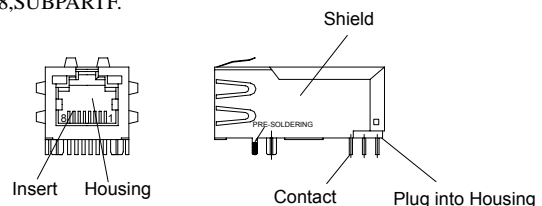
Operating Life:750 Cycles MIN.

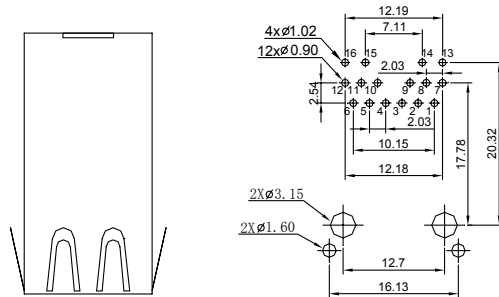
#### Environmental

1.Storage Temp:-40°C TO +85°C.

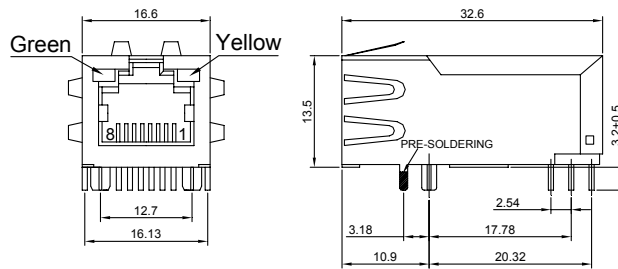
2.Operating Temp:0°C TO +70°C

3. MATES WITH MODULAR PLUG CONFORMING TO FCC PART 68,SUBPARTF.



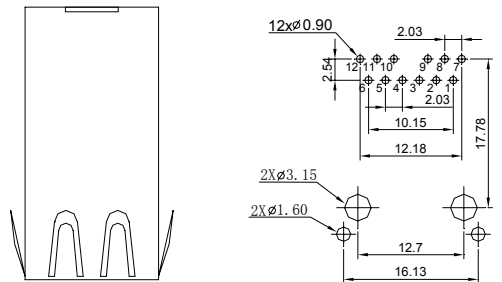


PC Board Layout  
Component Side Shown

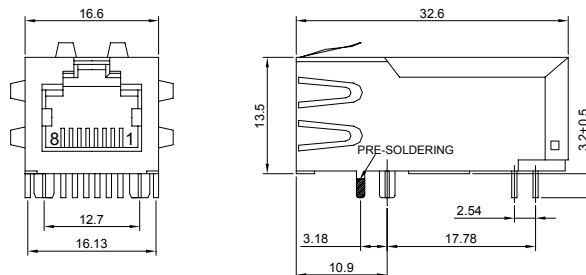


UNIT:mm Unless otherwise specified,all tolerances are  $\pm$ 0.25

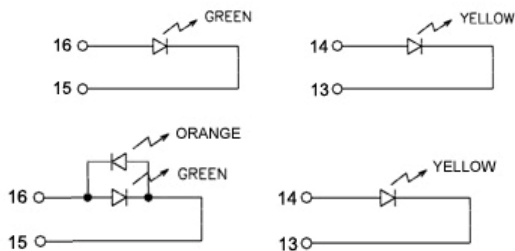
NO LED



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 V
Green	565 nm	2.5 V	2.2 V

\* With a forward current of 20 mA

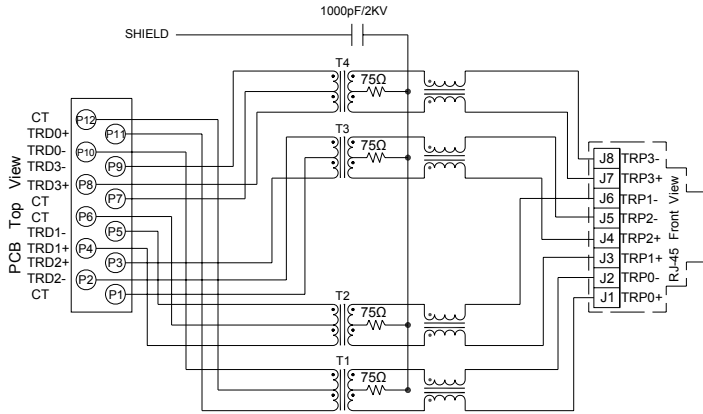
Standard LED	Wavelength	Forward* V (MAX)	(TYP)
Yellow	585 nm	2.5 V	2.1 - 2.2 V
Green	565 nm	2.5 V	2.1 - 2.2 V
Orange	610 nm	2.5 V	2.1 - 2.2 V

\* With a forward current of 20 mA

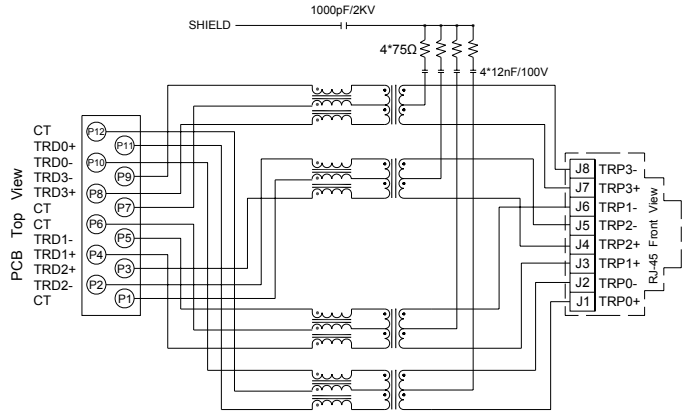


SCHEMATICS

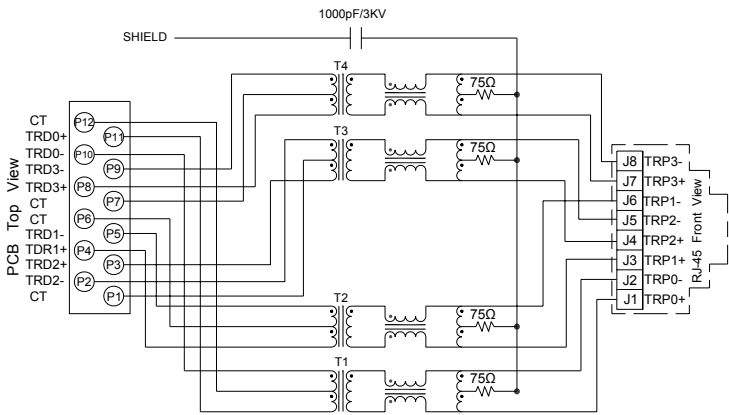
1301



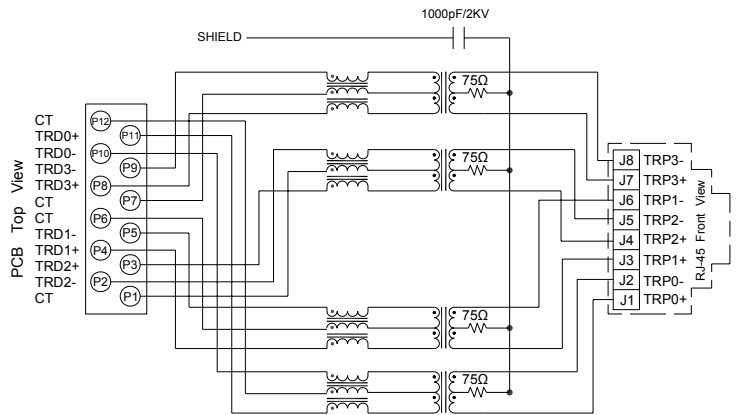
1302



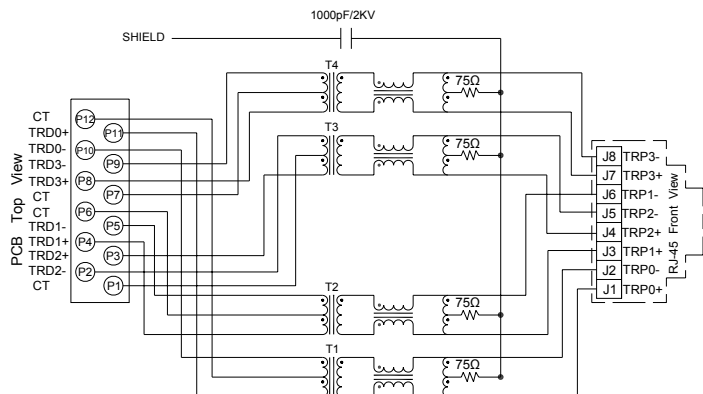
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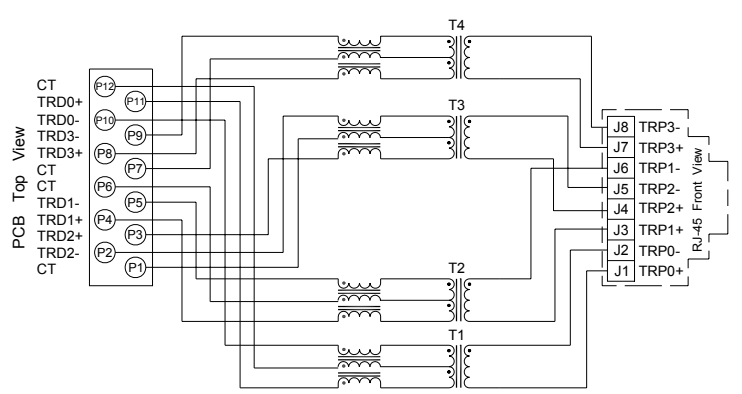
1304



1305



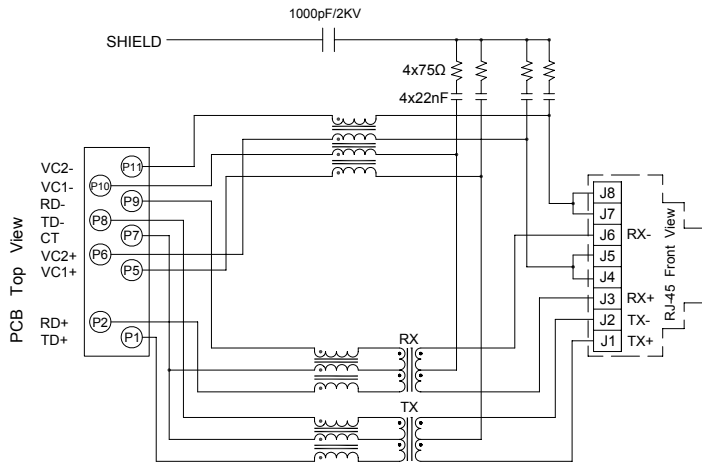
1306



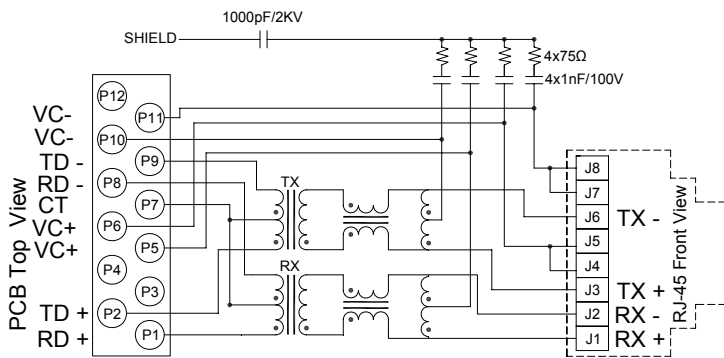


### POE SCHEMATICS

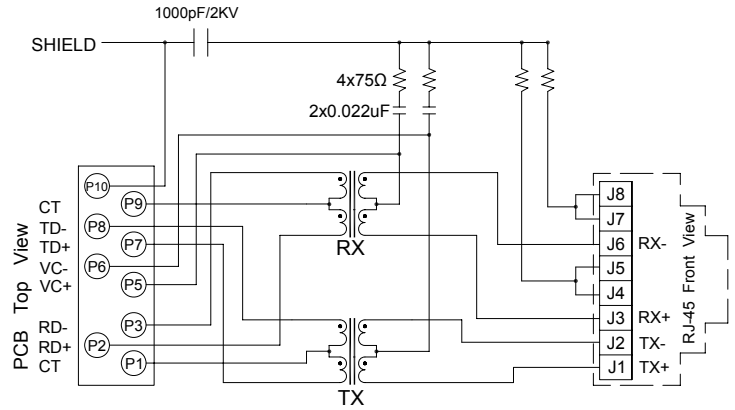
#### 1401



#### 1403



#### 1402



#### 1404

