

## HR961142A

### Electrical Specification @25°C

RoHS Compliant (PB Free)

Operating Temperature Range: 0°C ~ +70°C

Isolation: 2250VDC 0.5mA 60sec (J1~8 to P1~8)

OCL: 350uH Minimum @100KHz 100mV with 8mADC

Insertion Loss: -1.0dB Maximum @300KHz ~ 100MHz

Return Loss: -20dB Minimum @1MHz ~ 10MHz / -16dB Minimum @10MHz ~ 30MHz  
-12dB Minimum @30MHz ~ 60MHz / -10dB Minimum @60MHz ~ 80MHz

Common Mode Rejection: -30dB Minimum @1MHz ~ 50MHz

-20dB Minimum @50MHz ~ 150MHz

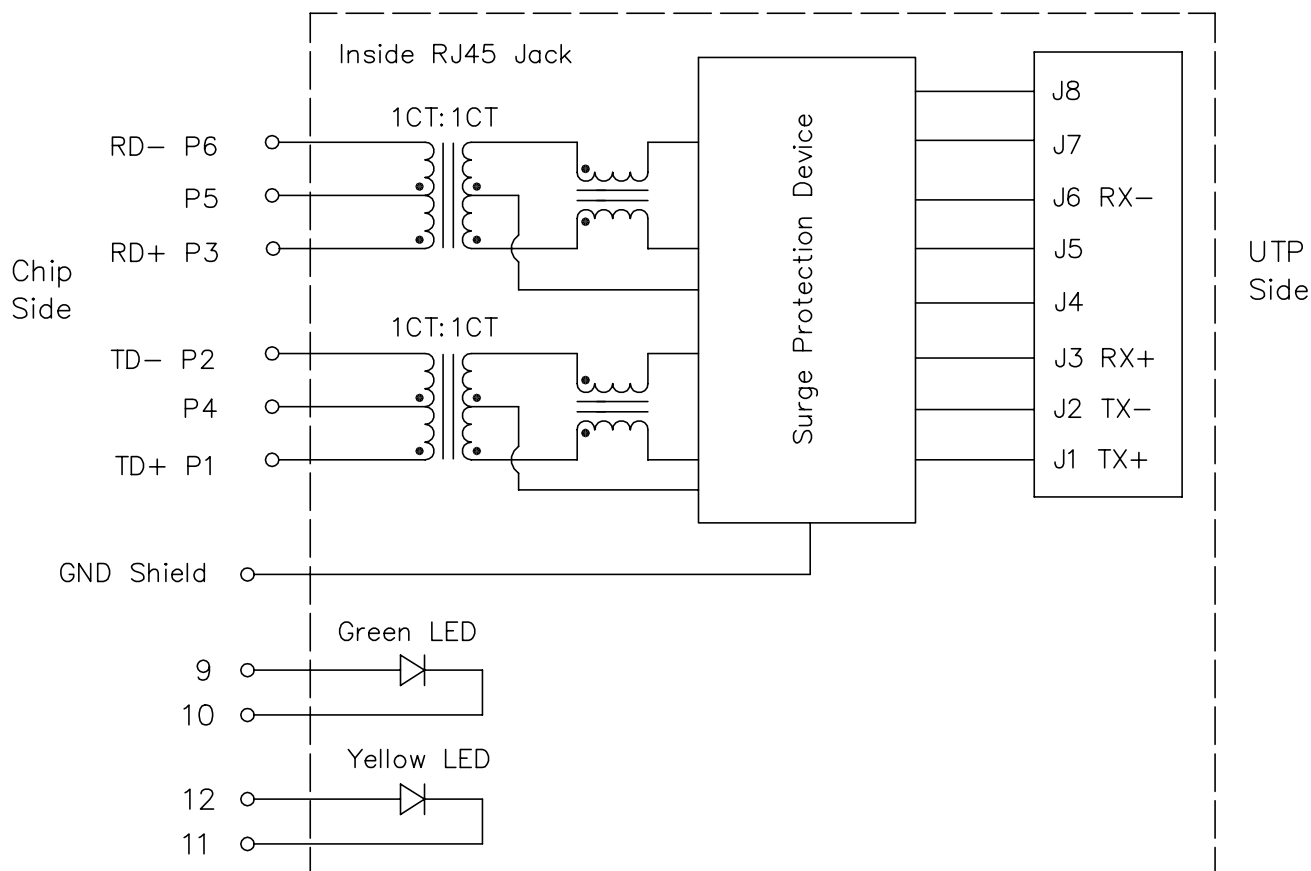
Crosstalk: -35dB Minimum @1MHz ~ 30MHz

-30dB Minimum @30MHz ~ 60MHz

-30dB Minimum @60MHz ~ 100MHz

Designed to meet IEC61000-4-5 level 3 (10/700uS: 4000V @40Ω; 8/20us: 1000A @2000V 2Ω)

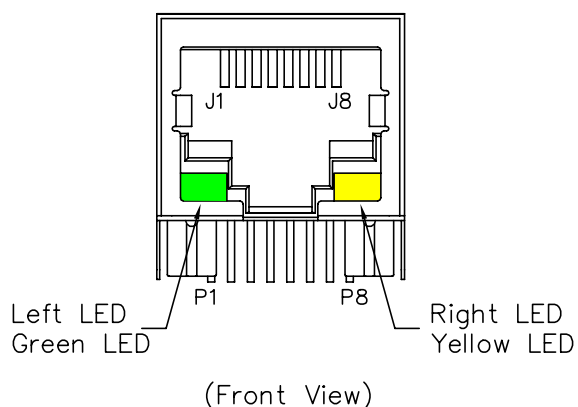
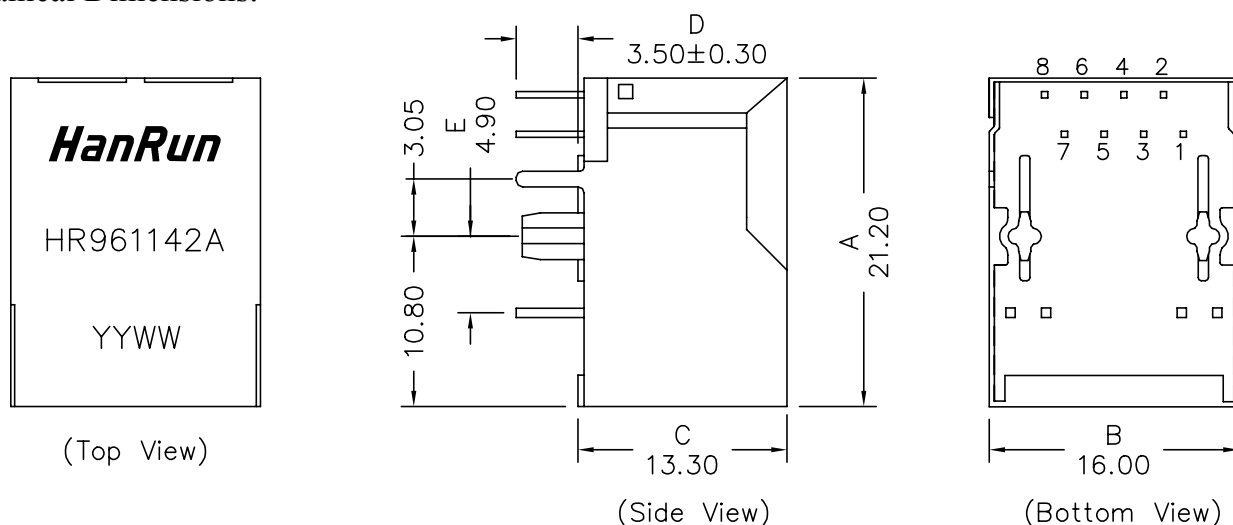
### Schematics



## HR961142A

- RoHS Compliant (PB Free)
- Designed for Network Interface Card Application
- Meets or Exceeds IEEE802.3 standards including 350uH Min OCL with 8mADC
- High performance for EMI suppression, Crosstalk, Return Loss and Consistent Electrical
- Minimum 2250VDC isolation per IEEE802.3 requirement
- Minimize PCB space and Simplify PCB Layout
- Less magnetic components to place on PCB, Higher reliability and yields

### Mechanical Dimensions:



Standard LED	Wavelength	Forward V (Min/Max)	Forward A	Type
Green	568nm	1.8V/2.8V	20mA	squareness
Yellow	585nm	1.8V/2.8V	20mA	squareness

Dimensions in mm

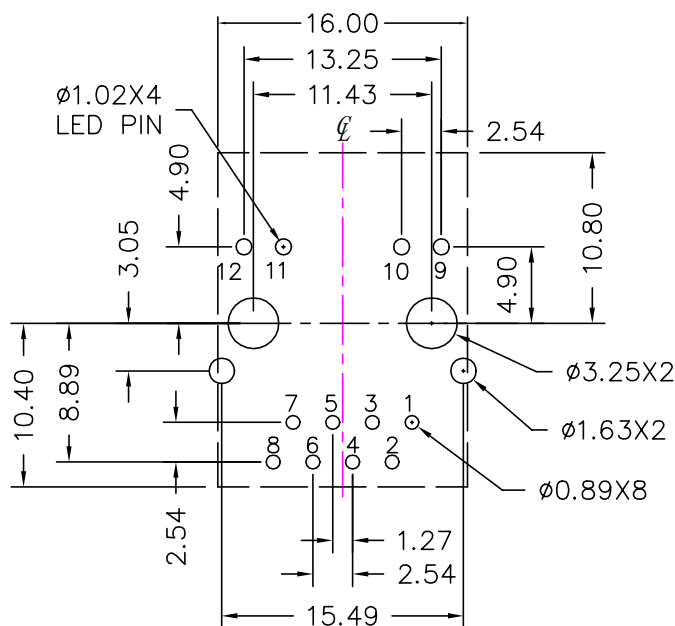
Unless otherwise specified, Tolerance: .xx ±0.25

REV.: 04

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## HR961142A

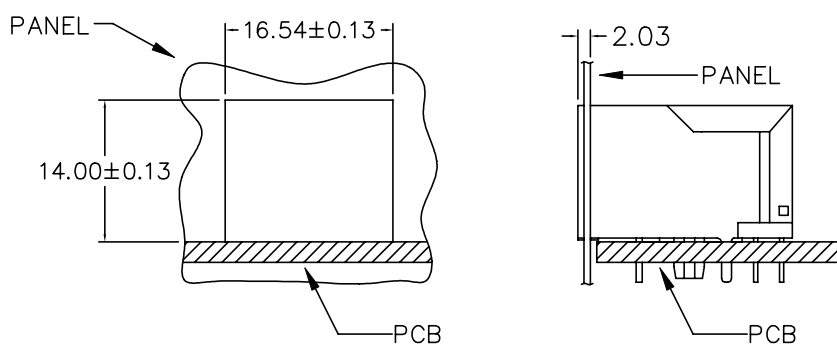
### PCB Layout:



Recommended PCB layout (Component Side View)

All dimension tolerance are  $\pm 0.08$  unless otherwise specified

### Suggested Panel Cutout:



SUGGESTED PANEL OPENING

Dimensions in mm

Unless otherwise specified, Tolerance: .xx  $\pm 0.25$

REV.: 04

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### Material Specification:

Housing: PA66 GF Black UL94V-0  
Shield: 30u" Nickel over 0.20mm Thickness Brass  
Insert: PA66 GF Black UL94V-0  
Phosphor Bronze 0.35mm Thickness  
Plating Area, 30u" gold over 50u" nickel  
Solder Area, 100u" tin over 50u" nickel

### Mechanical Performance:

Mating force: 5 lbs Maximum  
Unmating force: 5 lbs Maximum  
Plug to Jack Retention force: 12 lbs Minimum  
Operating life: 750 Cycles Minimum

### Operating and Storage Temperature:

Operating Temperature Range: 0°C ~ +70°C  
Storage Temperature Range: -40°C ~ +85°C

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### Application Note

