

## HR915102AE

### Electrical Specification @25°C

Isolation: 2250VDC 0.5mA 60S (UTP Side to Chip Side)

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

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

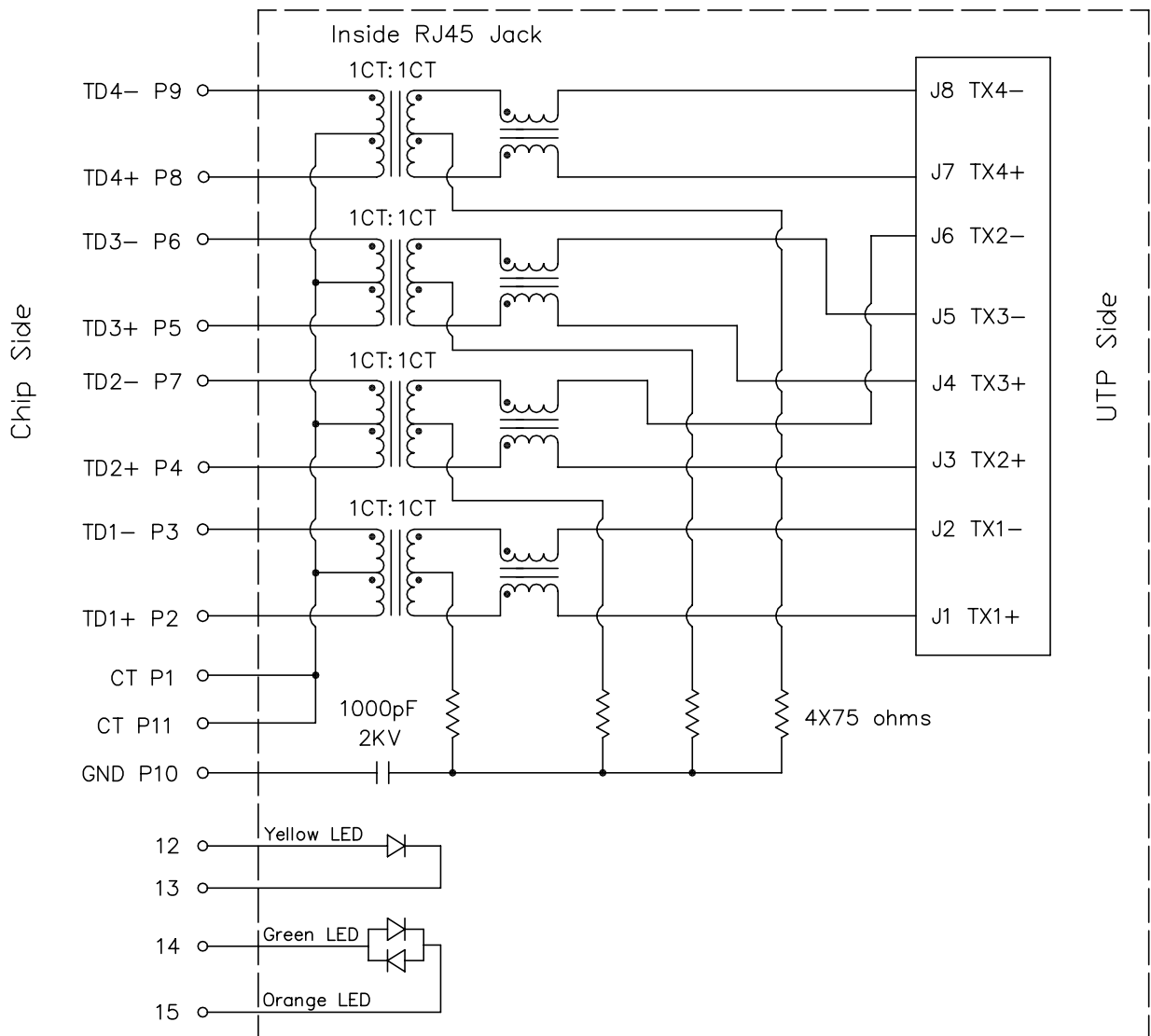
Return Loss: -20dB Minimum @1MHz ~ 10MHz / -16dB Minimum @30MHz  
-12dB Minimum @60MHz ~ 80MHz

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

-20dB Minimum @50MHz ~ 100MHz

Crosstalk: -35dB Minimum @1MHz ~ 30MHz / -30dB Minimum @30MHz ~ 100MHz

### Schematics

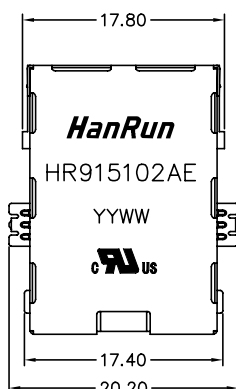


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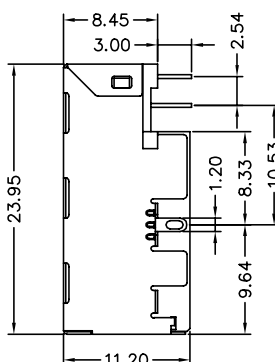
### Commercial standards, specifications and Summary:

- RoHS Compliant (Pb Free)
- Sing port Tab-UP with internal magnetics for 10/100/1000Base -T
- Meets or Exceeds IEEE802.3ab 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
- UL Recognized Component: File # E330599

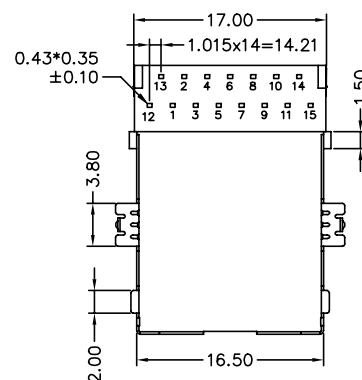
### Mechanical Dimensions:



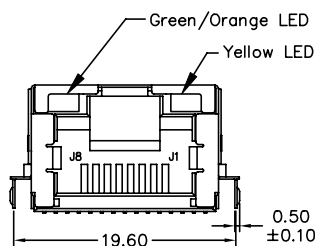
(Top View)



(Side View)



(Bottom View)



(Front View)

Standard LED	Wavelength	Forward V (Min/Max)	Forward A	Type
Green/Orange	569nm/600nm	1.8V/2.8V	20mA	squareness
Yellow	585nm	1.8V/2.8V	20mA	squareness

Dimensions in mm

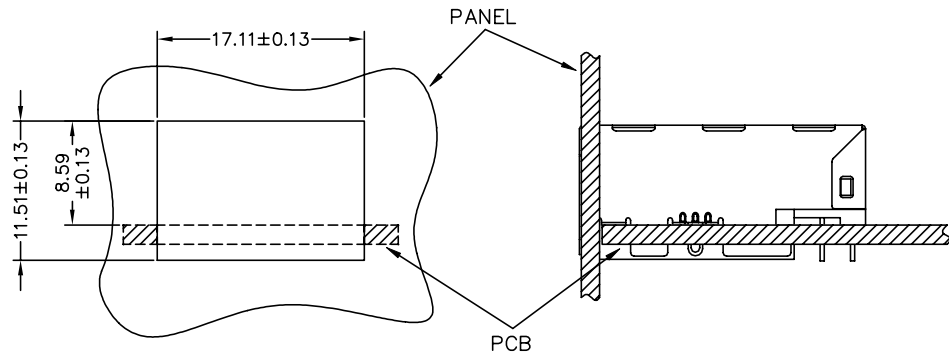
Unless otherwise specified, Tolerance: .xx ±0.25

REV.: 01

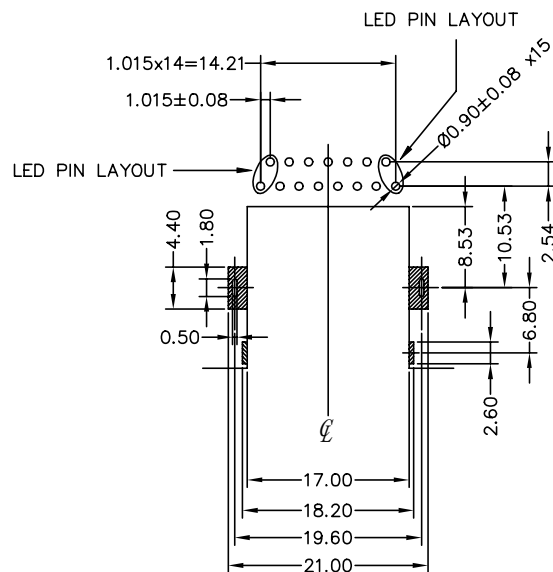
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Suggested Panel Opening:



PCB Layout:



Recommended PCB layout (Component Side View)

Component side PCB thickness: 1.60mm

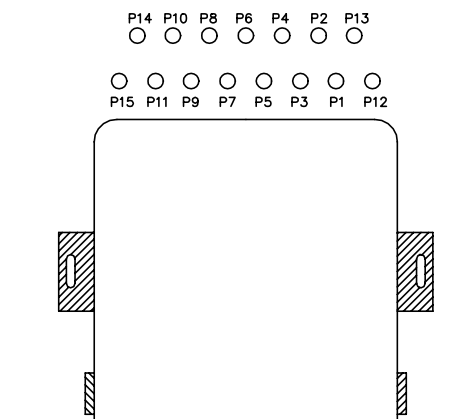
All dimension tolerance are  $\pm 0.08$  unless otherwise specified

NOTES:

THE SHADED AREA ON THE CUSTOMER BOARD ARE RECOMMENDED  
TO CLEAR OFF ANY VIA HOLE OR COMPONENT PAD

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### Pin Assignments:



(COMPONENT SIDE VIEW)

### 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:  $-40^{\circ}\text{C} \sim +85^{\circ}\text{C}$   
Storage Temperature Range:  $-40^{\circ}\text{C} \sim +85^{\circ}\text{C}$