

**HR851178C**

**Electrical Specification @25°C**

RoHS Compliant (PB Free)

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

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

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

Insertion Loss: -1.1dB Maximum @100KHz ~ 100MHz

Return Loss: -16dB Minimum @1MHz ~ 40MHz

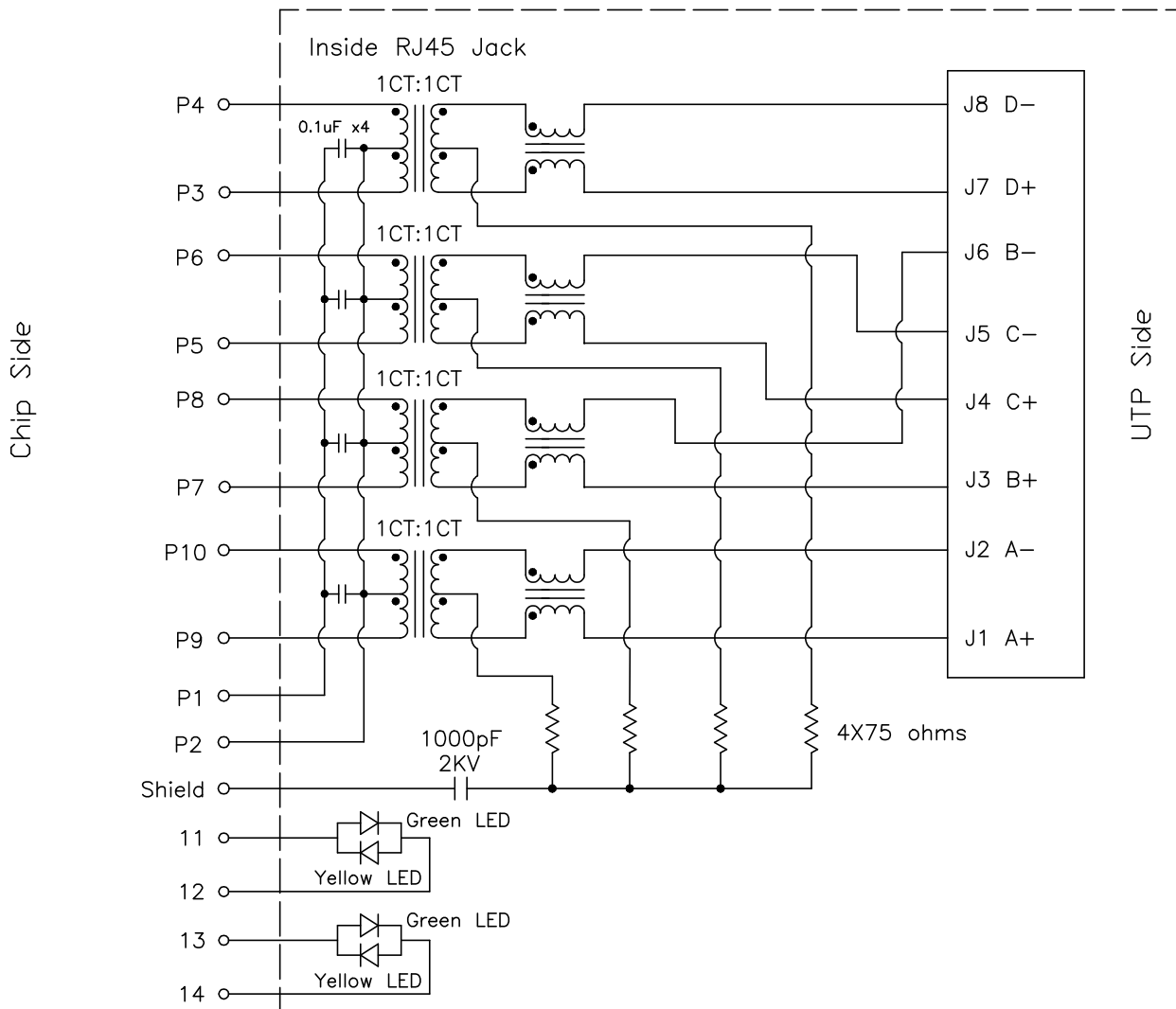
-13.5dB Minimum @60MHz / -12dB Minimum @80MHz

-10dB Minimum @100MHz

Common Mode Rejection: -30dB Minimum @1MHz ~ 100MHz

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

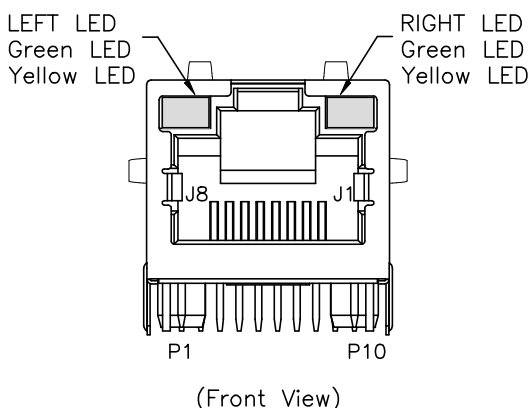
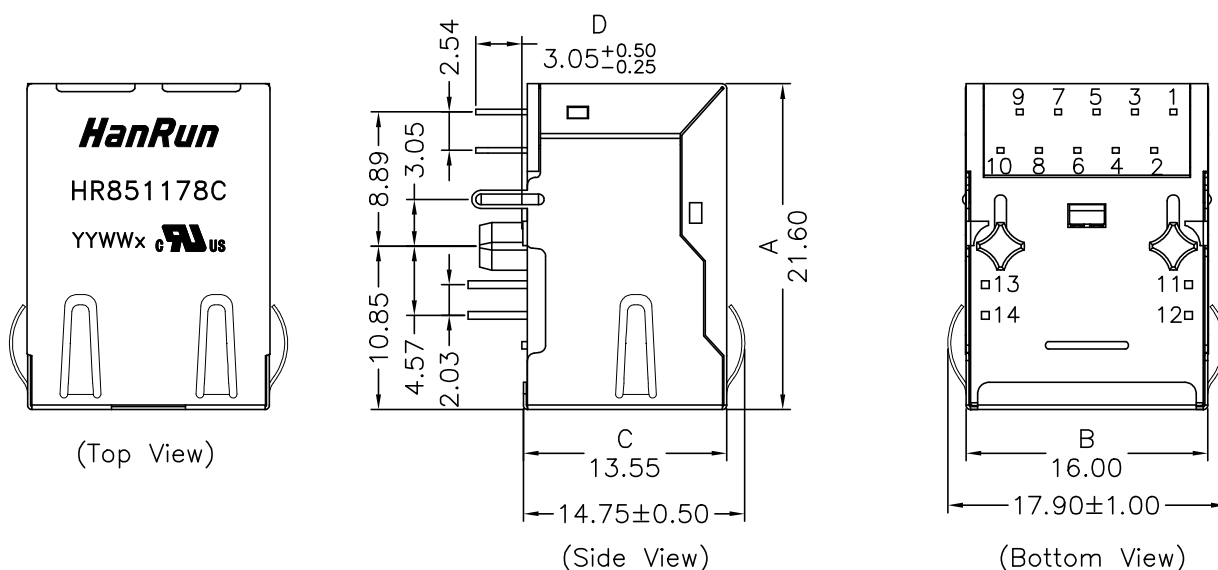
**Schematics**



**HR851178C**

- RoHS Compliant (PB Free)
- 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
- Minimize PCB space and Simplify PCB Layout
- Less magnetic components to be placed on PCB, higher reliability and yields
- UL Recognized Component: File # E330599

**Mechanical Dimensions:**



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

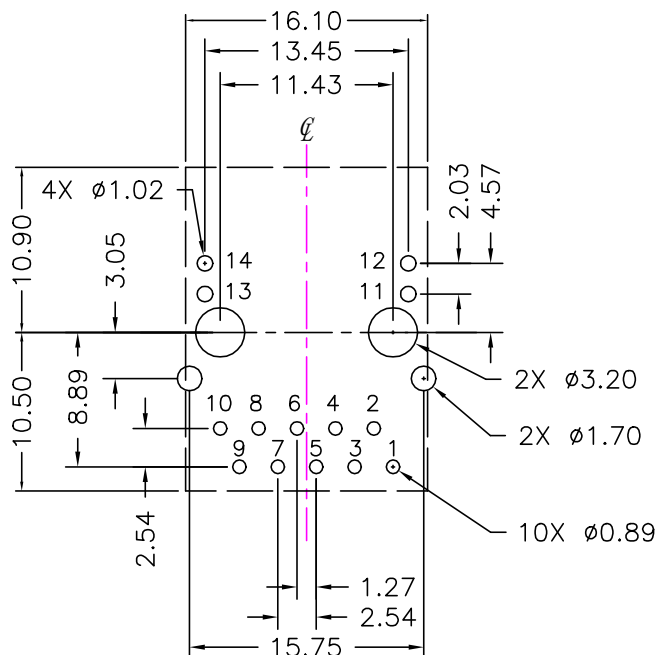
Dimensions in mm

Unless otherwise specified, Tolerance: .xx ±0.25

REV.: 00

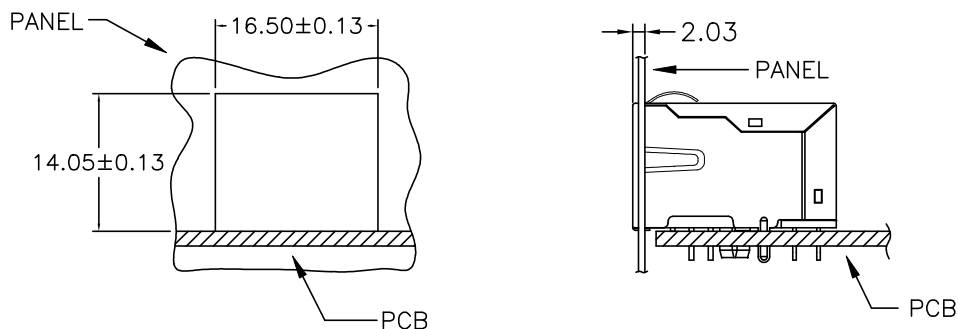
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PCB Layout:



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.: 00

## HR851178C

### Material Specification:

Housing: PA66 GF Black UL94V-0  
Shield: 50u" 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  
Operating life: 750 Cycles Minimum

### Operating and Storage Temperature:

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