

Single Port RJ45 Connector  
with Integrated Magnetics and LED  
for 100/1000Base-T Applications

HR851178C

Electrical Specification @25°C

RoHS Compliant (PB Free)

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

Isolation: 1500Vrms 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

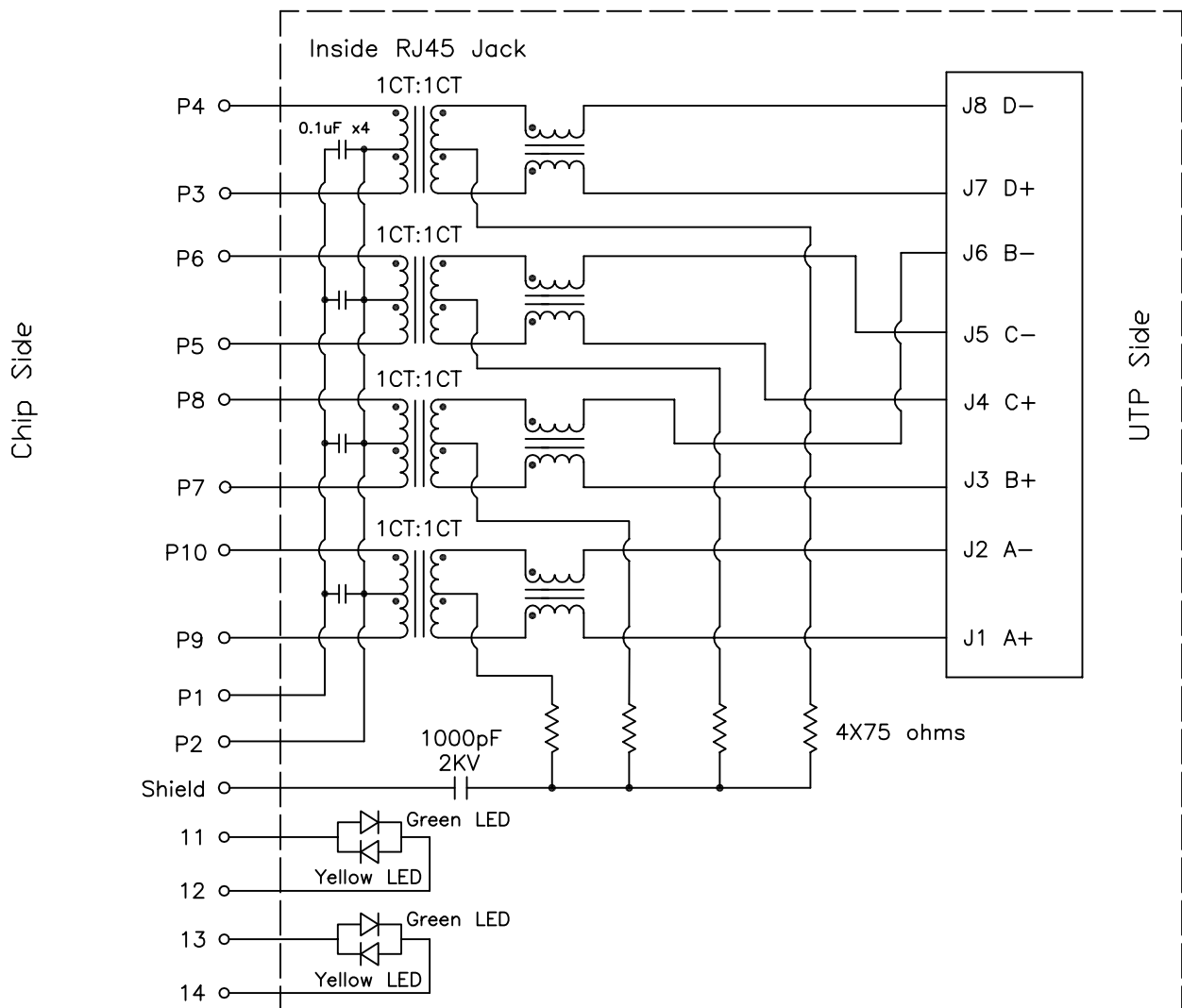
-13.5dB Minimum @60MHz / -12dB Minimum @80MHz

-10dB Minimum @100MHz

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

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

Schematics

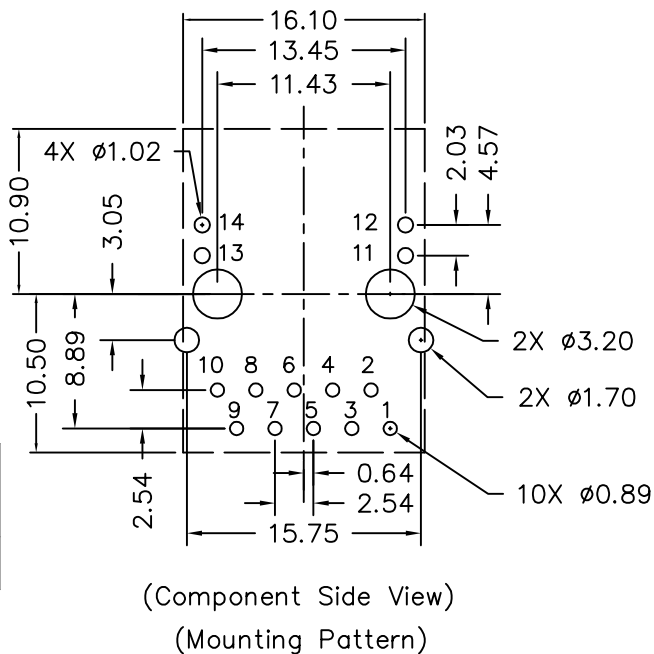
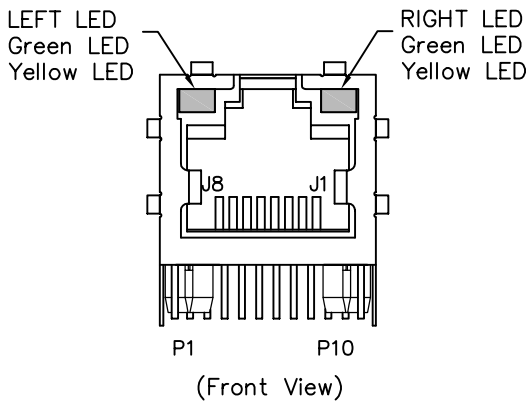
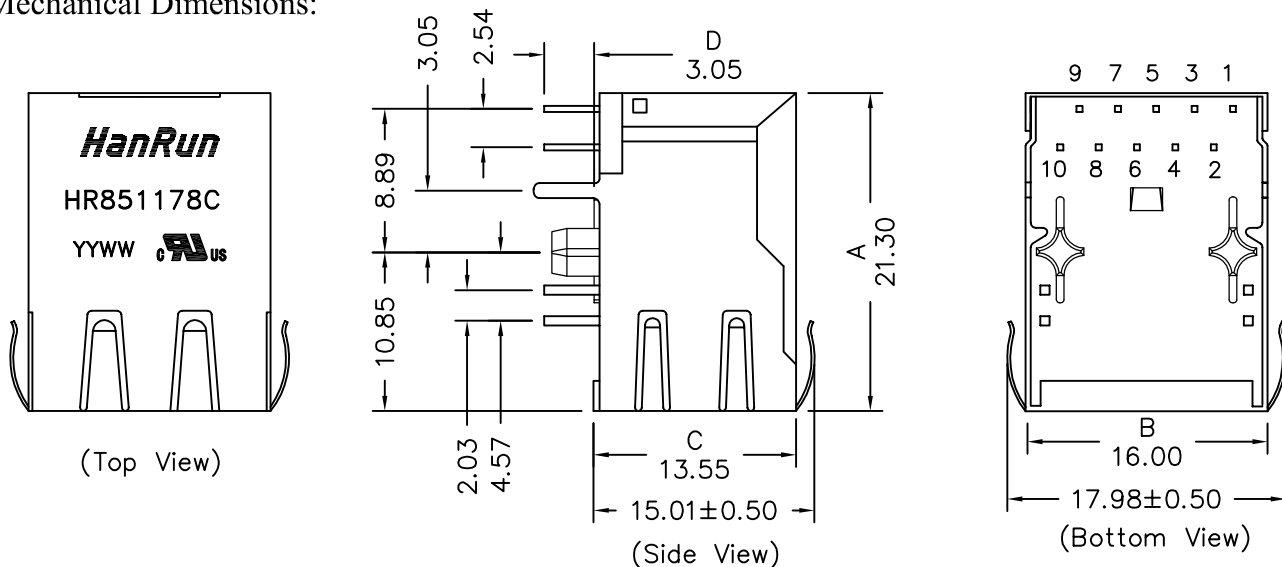


# 1x1 Port Tab-UP RJ45 Connector with Magnetics Module and LED

## HR851178C

- RoHS Compliant (PB Free)
- UL Recognized Component: File # E330599
- Meets or Exceeds IEEE802.3ab standards including 350uH Min OCL with 8mADC
- High performance for EMI suppression, Crosstalk, Return Loss and Consistent Electrical
- Minimum 1500Vrms isolation per IEEE802.3 requirement
- Minimize PCB space and Simplify PCB Layout
- Less magnetic components to be placed on PCB, higher reliability and yields

### 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