

HY971161C

Electrical Specification @25°C

RoHS Compliant (PB Free)

Isolation: 1500Vrms 0.5mA 60S (UTP Side to Chip Side)

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

Insertion Loss: -1.0dB Maximum @100KHz ~ 60MHz / -1.1dB Maximum @60MHz ~ 100MHz

Return Loss: -18dB Minimum @0.3MHz ~ 30MHz / -14dB Minimum @40MHz ~ 60MHz
-12dB Minimum @80MHz ~ 100MHz

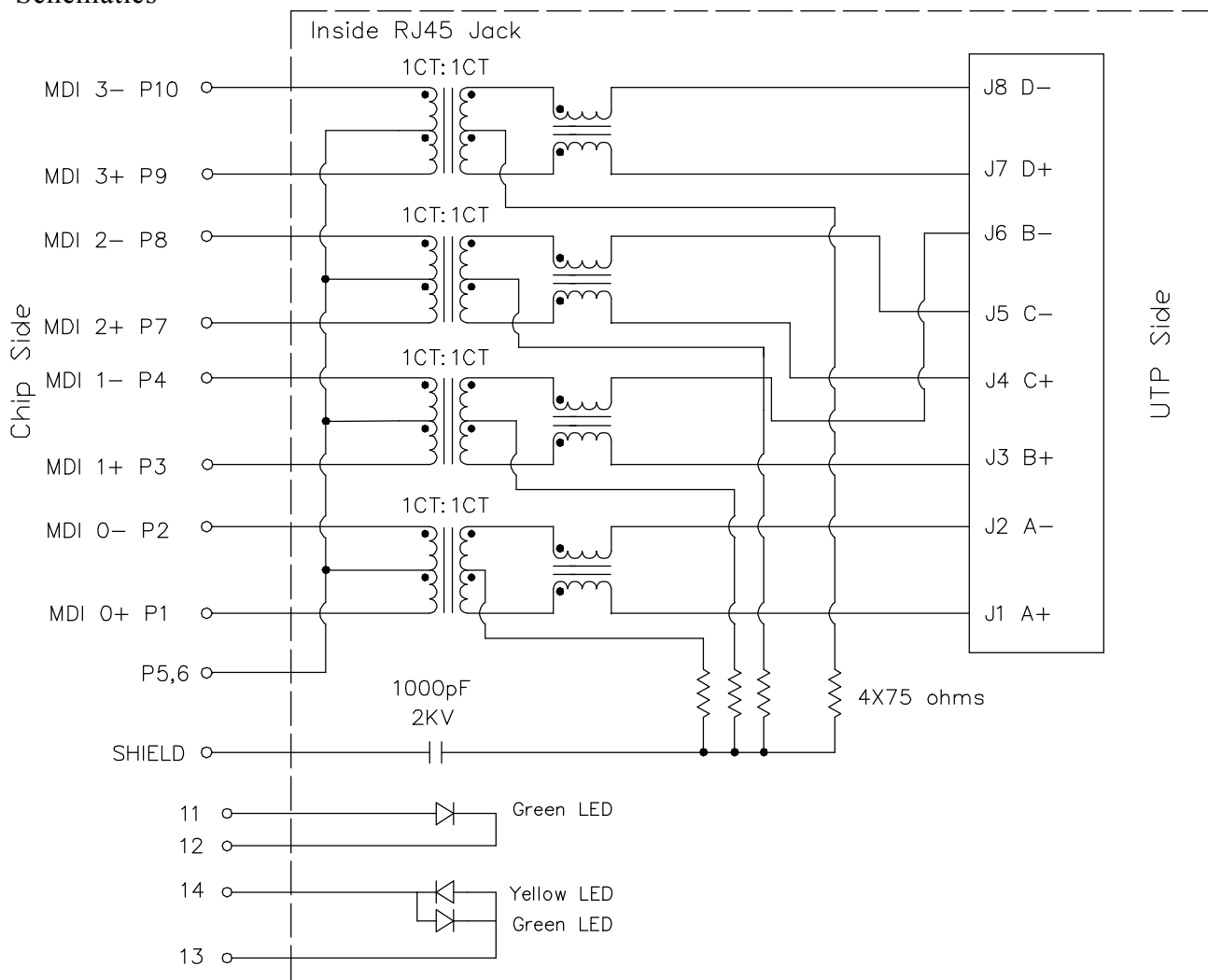
Common Mode Rejection: -40dB Minimum @1MHz ~ 60MHz

-35dB Minimum @60MHz ~ 100MHz

Crosstalk: -35dB Minimum @1MHz ~ 10MHz / -26dB Minimum @15MHz ~ 60MHz

-24dB Minimum @60MHz ~ 100MHz

Schematics

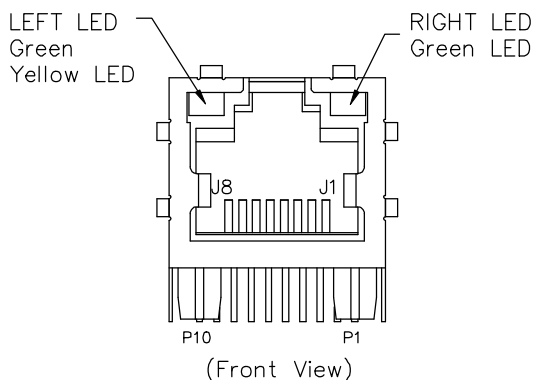
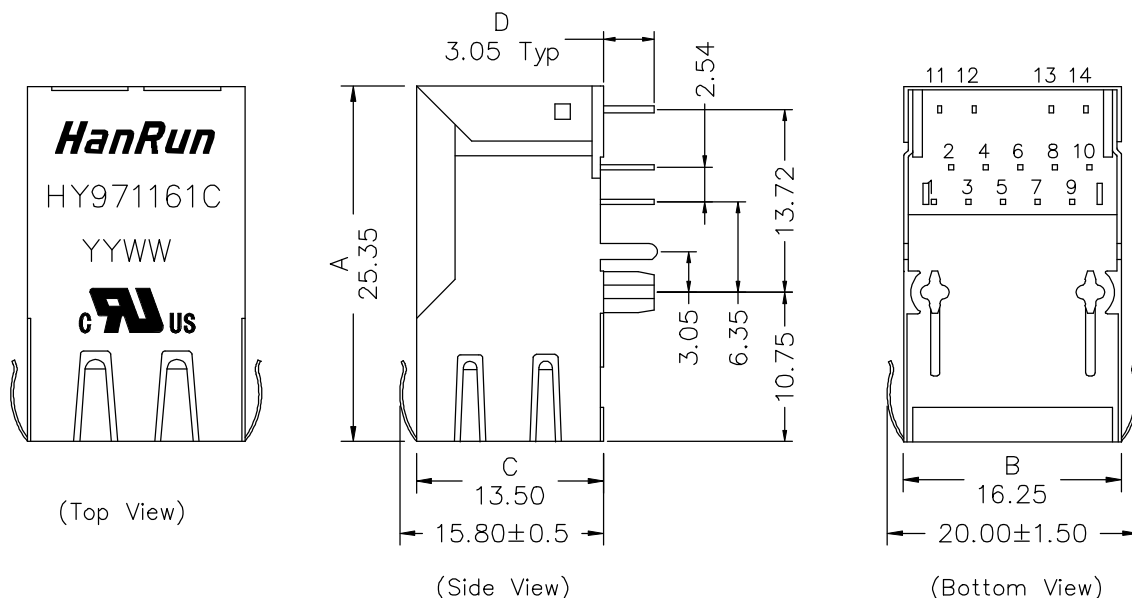


1x1 Port Tab-UP RJ45 Connector
with Integrated Magnetics and LED

HY971161C

- RoHS Compliant (PB Free)
- Designed for Network Interface Card Application
- 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 place 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/586nm	1.8V/2.8V	20mA	squareness
Yellow	586nm	1.8V/2.8V	20mA	squareness

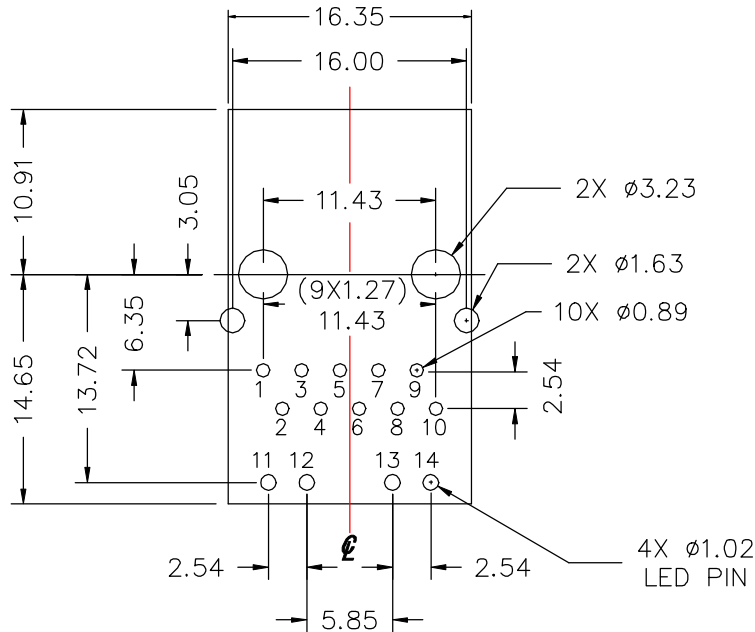
Dimensions in mm

Unless otherwise specified, Tolerance: .xx ±0.25

REV.: A/2

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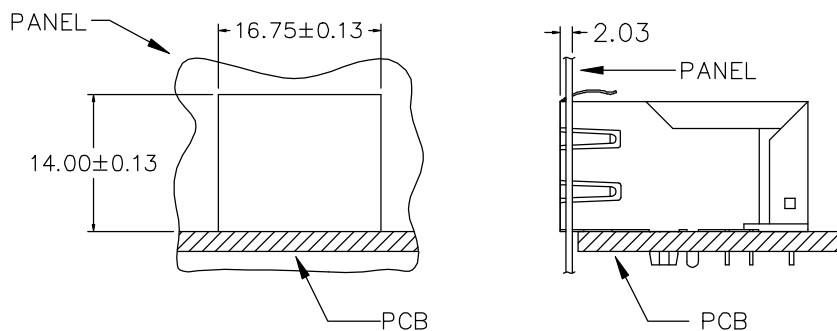
PCB Layout:



Recommended PCB layout (Component Side View)

All dimension tolerance are ± 0.08 unless otherwise specified

Suggested Panel Cutout:



Dimensions in mm

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

REV.: A/2

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Material Specification:

Housing: PBT GF Black UL94V-0
Shield: 30u" Nickel over 0.20mm Thickness Brass
Insert: PBT 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: 20 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