

Stacked 2x6 RJ45 Connector
with Integrated Magnetics and LED
for 10/100/1000Base-T Hub and Switch application



HR872635H

Electrical Specification @25°C

RoHS Compliant (PB Free)

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

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

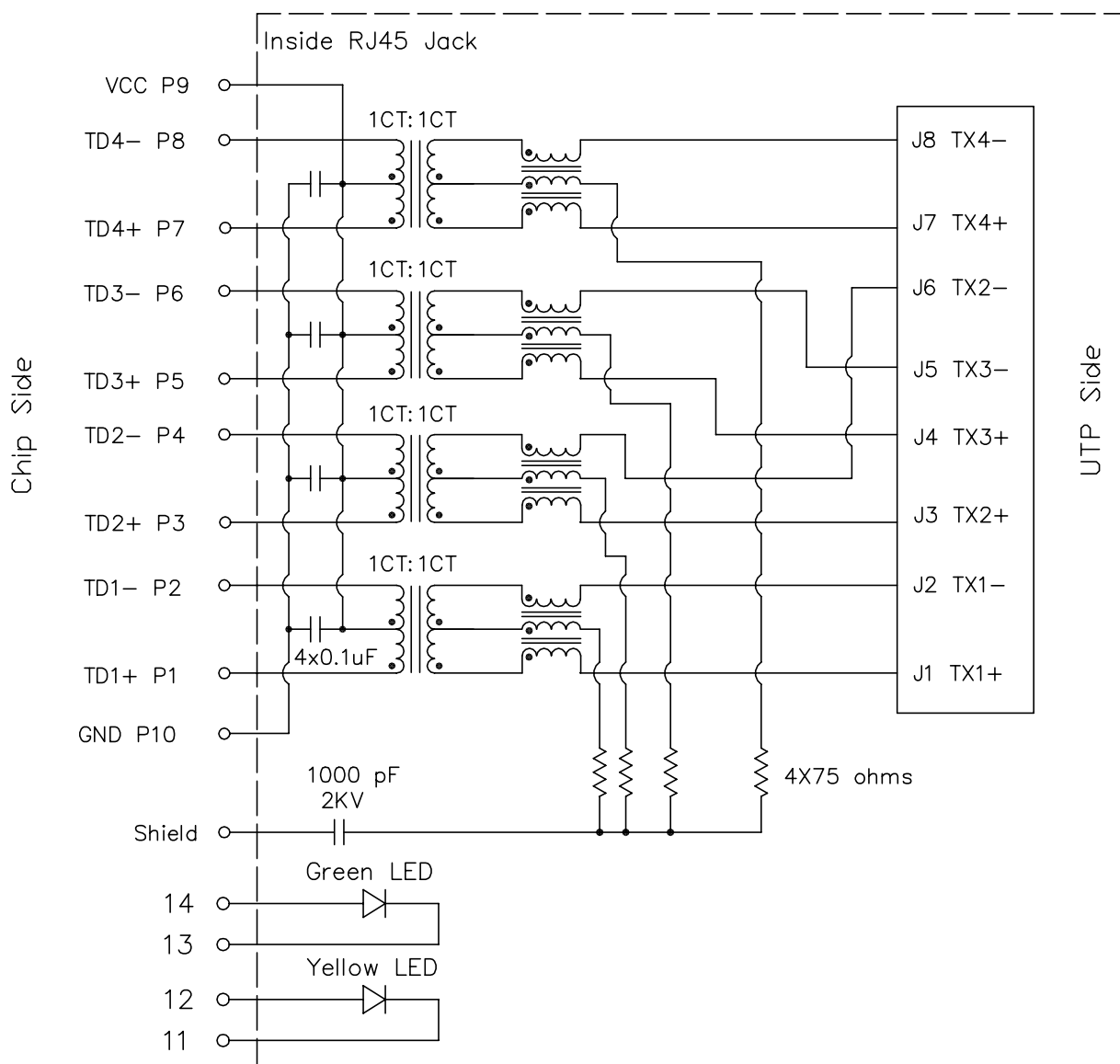
Insertion Loss: -1.0dB Maximum @1MHz ~ 100MHz

Return Loss: -18dB Minimum @1MHz ~ 30MHz / -13.5dB Minimum @30MHz ~ 60MHz
-12dB Minimum @60MHz ~ 80MHz / -10dB Minimum @80MHz ~ 100MHz

Common Mode Rejection: -30dB Typical @1MHz ~ 50MHz
-20dB Typical @50MHz ~ 150MHz

Crosstalk: -40dB Typical @1MHz ~ 30MHz / -35dB Typical @30MHz ~ 60MHz
-30dB Typical @60MHz ~ 80MHz

Schematics



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Commercial standards, specifications and Summary:

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 place on PCB, Higher reliability and yields
UL Recognized Component: File # E330599

Material Specification:

Housing: PBT 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
RJ45 Contact pin: PA66 GF Black UL94V-0
Brass; 100u" Tinning
LED Conductor: PC Transparent UL94V-0

Mechanical Performance:

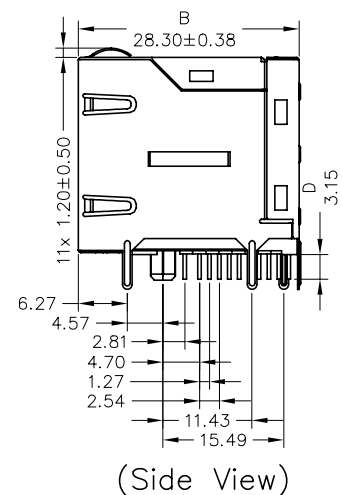
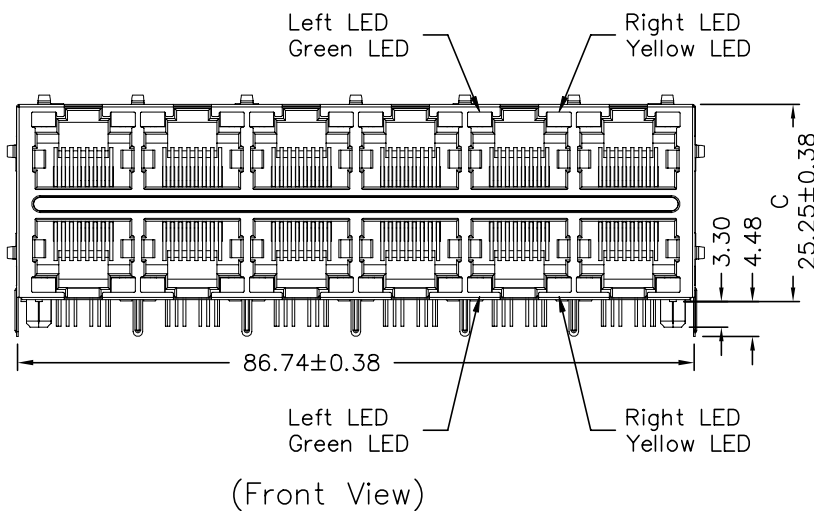
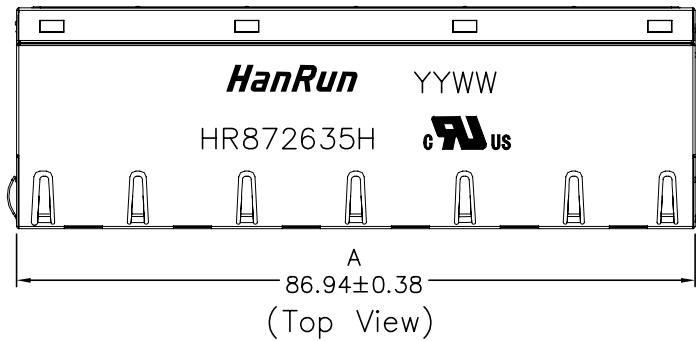
Contact resistance: 30 mΩ Maximum
Mating force: 5 lbs Maximum
Unmating force: 5 lbs Maximum
Operating life: 750 Cycles Minimum

Operating and Storage Temperature:

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

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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

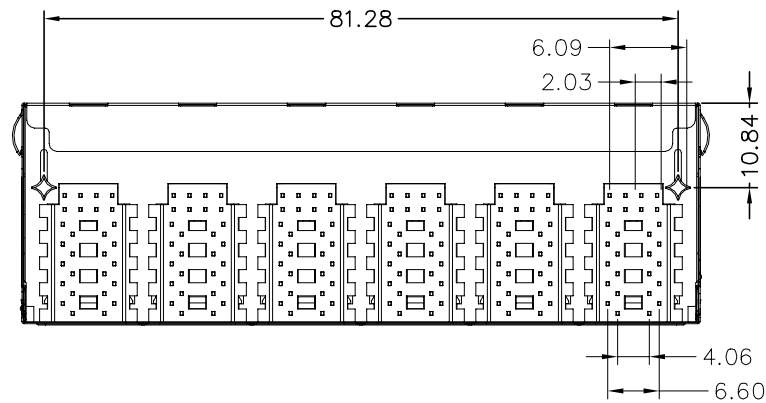
Dimensions in mm

Unless otherwise specified, Tolerance: .xx ±0.25

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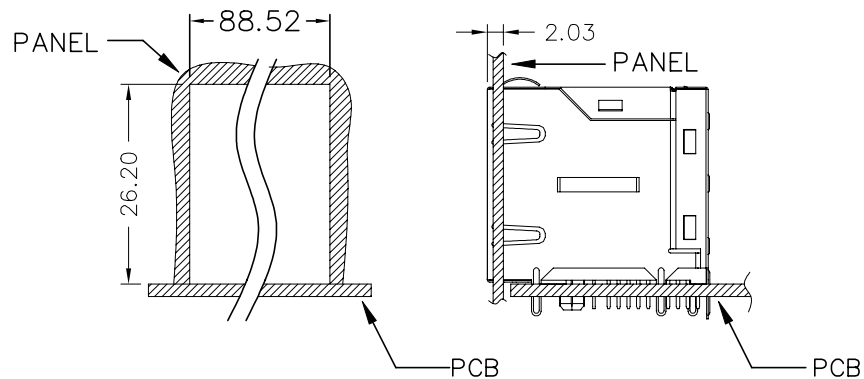
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(Bottom View)

Suggested Panel Cutout:



SUGGESTED PANEL CUTOUT

Dimensions in mm

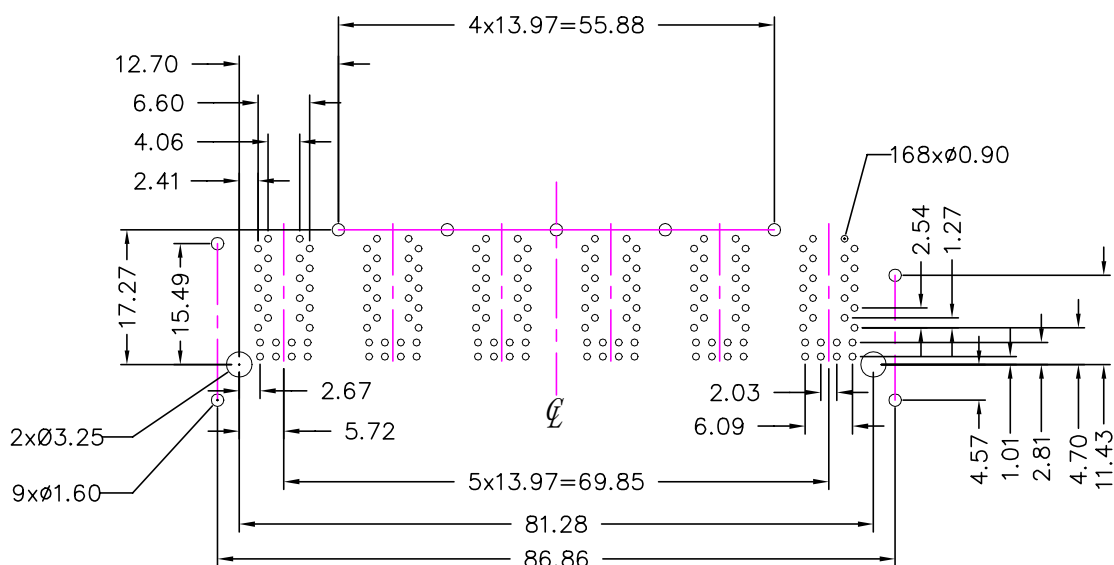
Unless otherwise specified, Tolerance: .xx ±0.25

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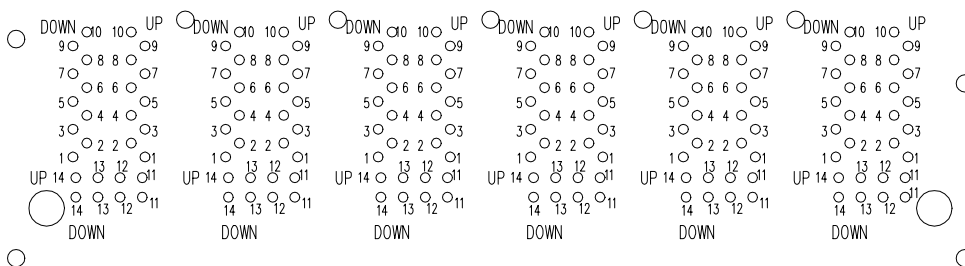
PCB Layout:



(Recommended PCB layout)

All dimension tolerance are ± 0.08 unless otherwise specified

Pin Assignments:



Dimensions in mm

Unless otherwise specified, Tolerance: .xx ± 0.25

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