

HR981199C

Electrical Specification @25°C

RoHS Compliant (PB Free)

Isolation: 2250VDC 0.5mA 60sec (J1+J3 to P6+P12)

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

Turns Ratio: 1CT:1CT $\pm 5\%$

Insertion Loss: -1.0dB Maximum @0.3MHz ~ 100MHz

Insertion Loss: -1.7dB Maximum @100MHz ~ 125MHz

Return Loss: -18dB Minimum @0.5MHz ~ 30MHz / -16dB Minimum @40MHz

-12dB Minimum @60MHz / -10dB Minimum @80MHz 100MHz

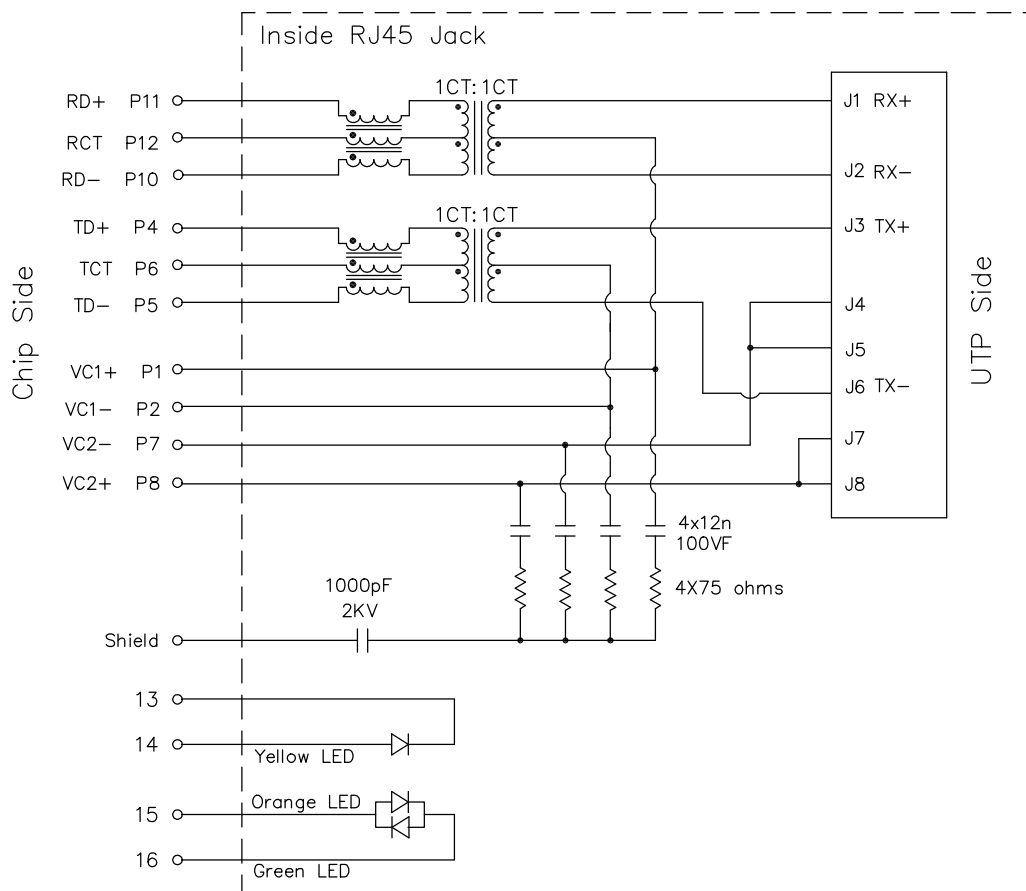
Common to Common Mode Rejection: -30dB Minimum @0.3MHz ~ 100MHz

Different to Common Mode Rejection: -25dB Minimum @0.3MHz ~ 100MHz

Crosstalk: -30dB Minimum @0.3MHz ~ 100MHz

Designed to support 57DC, 350mA current ability when using VC1 channel or VC2 channel
(Two channels total 700mA)

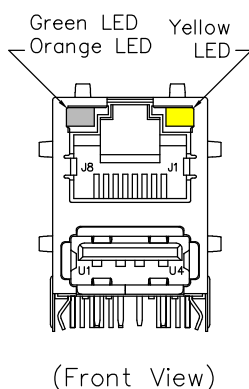
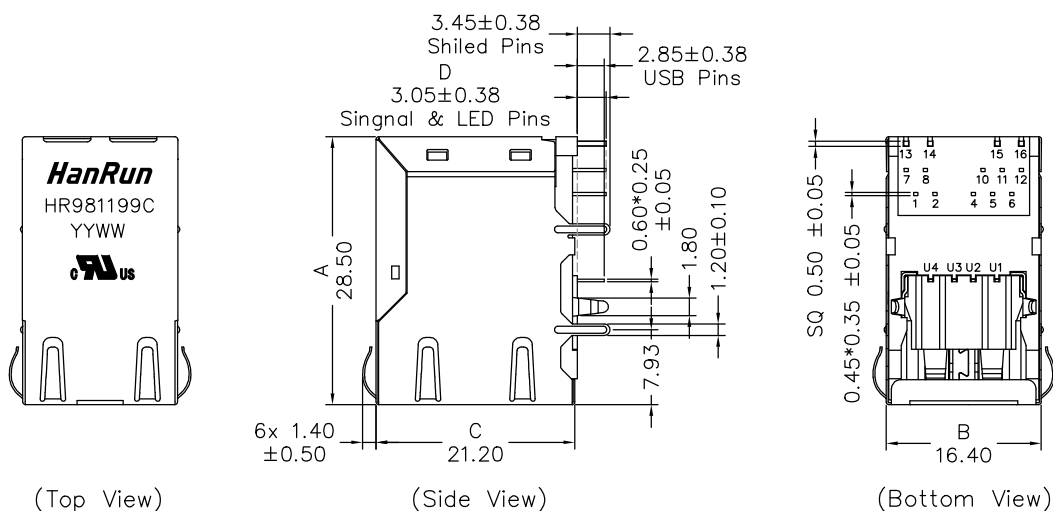
Schematics



HR981199C

- RoHS Compliant (PB Free)
- Meets or Exceeds IEEE802.3af 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:



Remark:
Remove Pin#3, Pin#9

Standard LED	Wavelength	Forward V (Min/Max)	Forward A	Type
Green/Orange	568nm/600nm	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.: 02

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Figure 1: Mechanical drawing of the PCB layout. The drawing shows a rectangular PCB with various components and dimensions. Components include 4x ø1.02 LED Pins, 10x ø0.89 Signal Pins, 4x ø0.92 USB Pins, 2x ø2.30 USB Shield, and 4x ø1.63 RJ Shield. Dimensions are given in millimeters. Key dimensions include a total width of 28.50, a total length of 16.40, and a central section width of 12.19. Pin spacing and component offsets are also specified.

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Material Specification:

RJ Housing: PBT GF Black UL94V-0
RJ Shield: 30u" Nickel over 0.20mm Thickness Brass
RJ 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
USB Contact: Phosphor Bronze
30u" Gold plating on contact area
100u" tin plating on solder tails
50u" nickel underplating overall
USB Shield: Brass, 80u" nickel plated over all
USB Housing: PBT GF Black UL94V-0

Mechanical Performance:

RJ Mating force: 5 lbs Maximum
RJ Unmating force: 5 lbs Maximum
RJ Operating life: 750 Cycles Minimum
USB Mating force: 7.868 lbs Maximum
USB Unmating force: 2.248 lbs Minimum
USB Operating life: 1500 Cycles Minimum

Operating and Storage Temperature:

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