

HR981180C

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 @100KHz ~ 100MHz / -1.2dB Maximum @100MHz ~ 125MHz

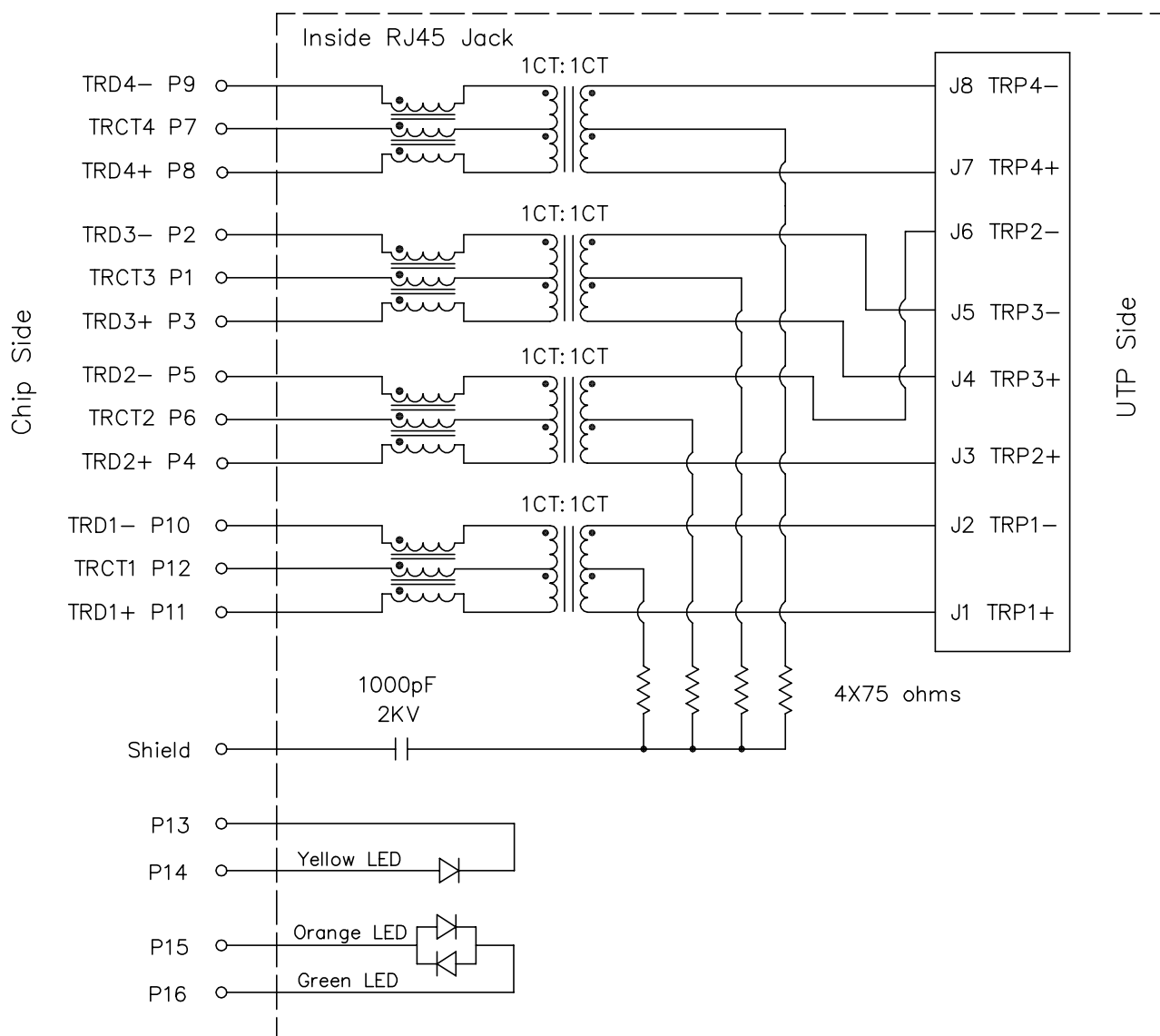
Return Loss: -18dB Minimum @0.5MHz ~ 30MHz / -13.5dB Minimum @30MHz ~ 60MHz
-12dB Minimum @60MHz ~ 80MHz / -10dB Minimum @80MHz ~ 100MHz

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

Differential to Common Mode Rejection: -35dB Minimum @100KHz ~ 100MHz

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

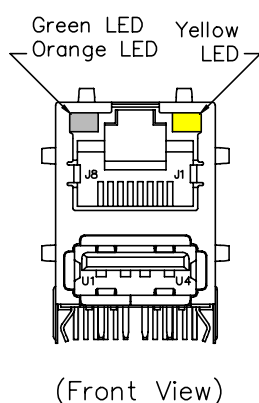
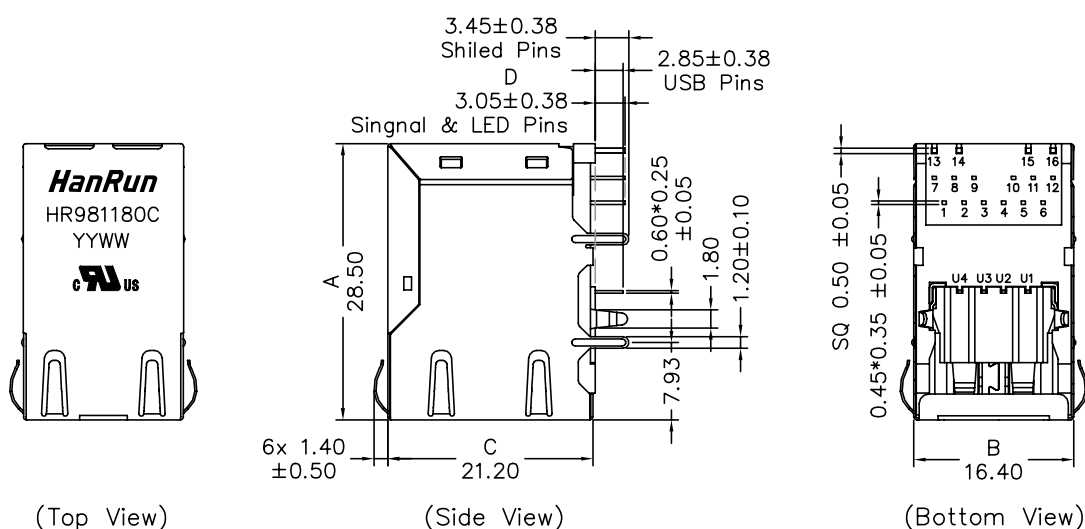
Schematics



HR981180C

- 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/Orange	568nm/600nm	1.8V/2.8V	20mA	squareness
Yellow	585nm	1.8V/2.8V	20mA	squareness

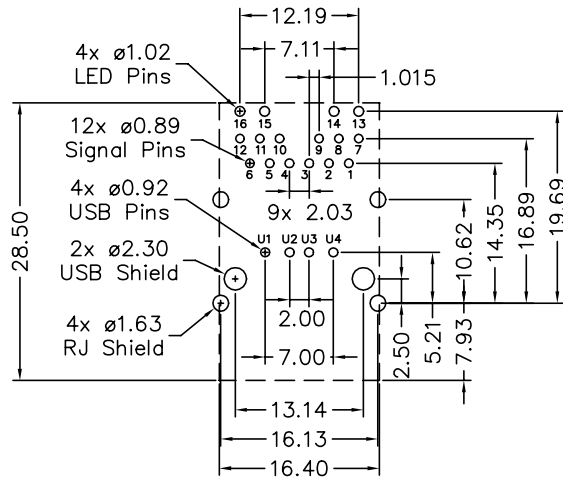
Dimensions in mm
Unless otherwise specified, Tolerance: .xx ±0.25

REV.: C

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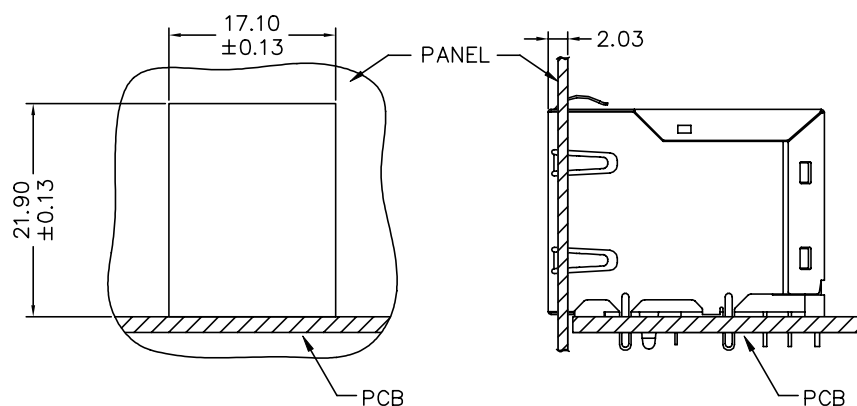
PCB Layout:



Recommended PCB layout (Component Side View)

All dimension tolerance are ± 0.08 unless otherwise specified

Suggested Panel Cutout:



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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