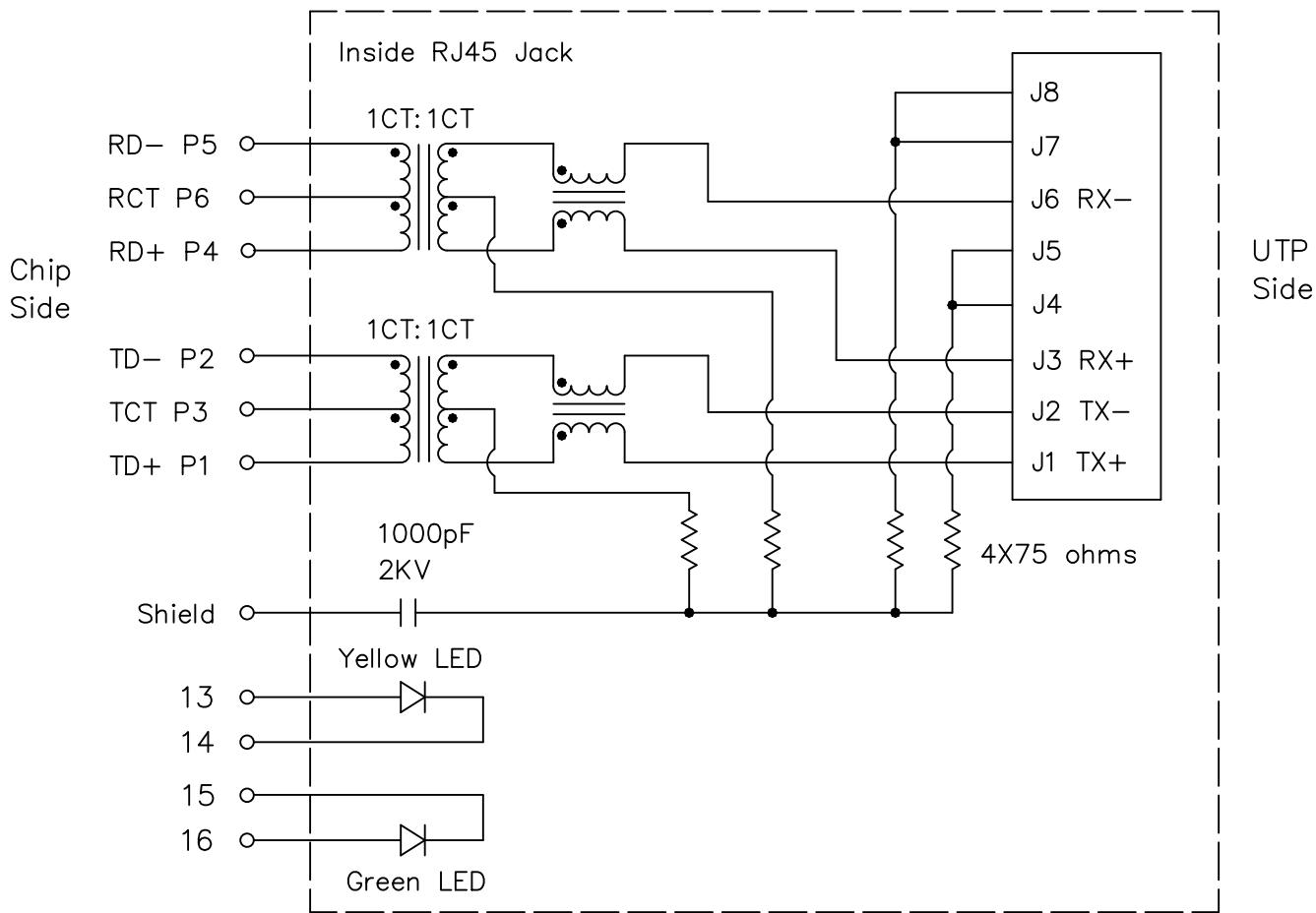


## HR981190C

### Electrical Specification @25°C

Isolation:	2250VDC Min.	0.5mA 60sec UTP Side to Chip Side
OCL:	350uH Min.	@100KHz 100mV with 8mADC
Insertion Loss:	-1.0dB Max.	@300KHz ~ 100MHz
Return Loss:	-20dB Min.	@1MHz ~ 10MHz
Return Loss:	-16dB Min.	@10MHz ~ 30MHz
Return Loss:	-12dB Min.	@30MHz ~ 60MHz
Return Loss:	-10dB Min.	@60MHz ~ 80MHz
Common Mode Rejection:	-30dB Min.	@1MHz ~ 50MHz
Common Mode Rejection:	-20dB Min.	@50MHz ~ 150MHz
Crosstalk:	-40dB Min.	@1MHz ~ 30MHz
Crosstalk:	-35dB Min.	@30MHz ~ 60MHz
Crosstalk:	-30dB Min.	@60MHz ~ 100MHz

### Schematics

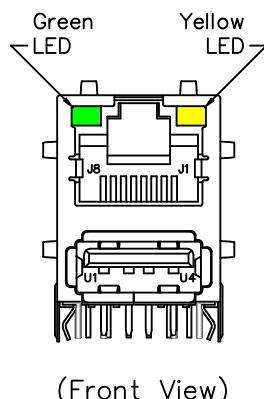
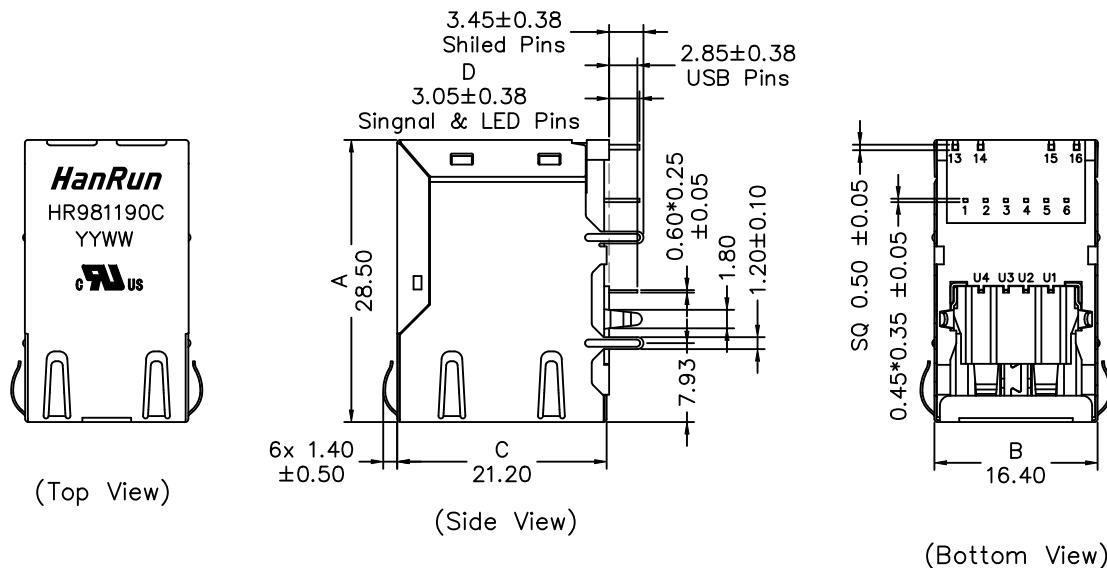


Notes: Connect CHS GND to PCB Ground

## HR981190C

- RoHS Compliant (PB Free)
- Meets or Exceeds IEEE802.3au 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#7, Pin#8, Pin#9, Pin#10, Pin#11, Pin#12

Standard LED	Wavelength	Forward V (Min/Max)	Forward A	Type
Green	568nm	1.8V/2.8V	20mA	squareness
Yellow	586nm	1.8V/2.8V	20mA	squareness

(Front View)

Dimensions in mm

Unless otherwise specified, Tolerance: .xx ±0.25

REV.: B2

2 of 4

DRAWN:

CHECK:

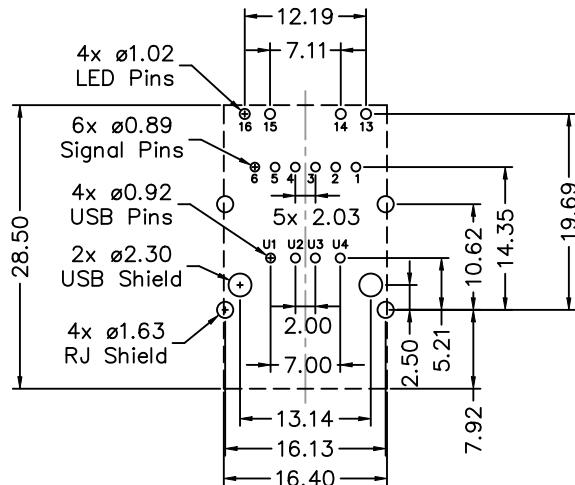
APPROVAL:

Tel: (0760)86103511 86103508 Fax: (0760)86103686 Post code: 528416

E-Mail: sales@hanrun.com http://www.hanrun.com

HR981190C

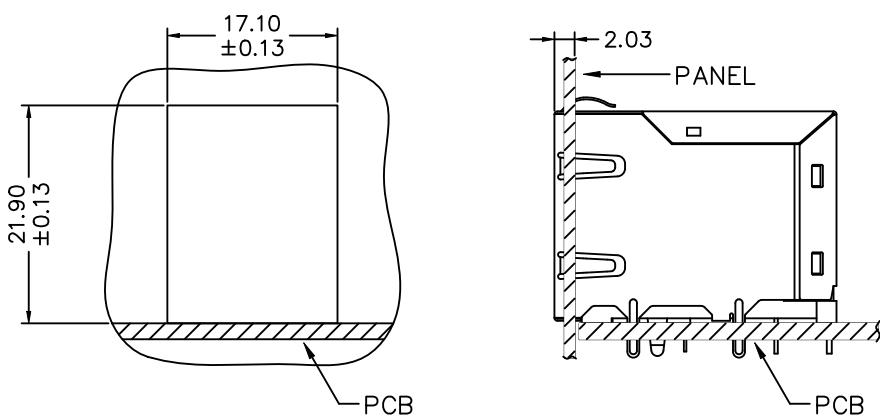
PCB Layout:



Recommended PCB layout (Component Side View)

All dimension tolerance are  $\pm 0.08$  unless otherwise specified

Pin Assignment:



## HR981190C

### 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