Low Profile 1x1 Port Tab-UP RJ45 Connector with Integrated Magnetics and LED for 10GBase-T Applications

**HanRun®** Electronics Company Limited

HR911025C

Electrical Specification @25°C

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

OCL: 120uH Minimum @100KHz 100mV with 8mADC

Insertion Loss: −3.0dB Maximum @100KHz ~1MHz / −1.5dB Maximum @1MHz ~ 250MHz
                −2.5dB Maximum @250MHz ~ 400MHz

Return Loss: −18dB Minimum @1MHz ~ 40MHz / −14dB Minimum @40MHz ~ 100MHz
             −11dB Minimum @100MHz ~ 250MHz / −8dB Minimum @250MHz ~ 500MHz

CMRR: −28dB Minimum @1MHz ~ 100MHz / −22dB Minimum @100MHz ~ 250MHz
      −20dB Minimum @250MHz ~ 500MHz

DCMR: −30dB Minimum @1MHz ~ 100MHz / −25dB Minimum @100MHz ~ 250MHz
      −20dB Minimum @250MHz ~ 500MHz

Crosstalk: −30dB Minimum @1MHz ~ 100MHz / −20dB Minimum @100MHz ~ 500MHz

Schematics
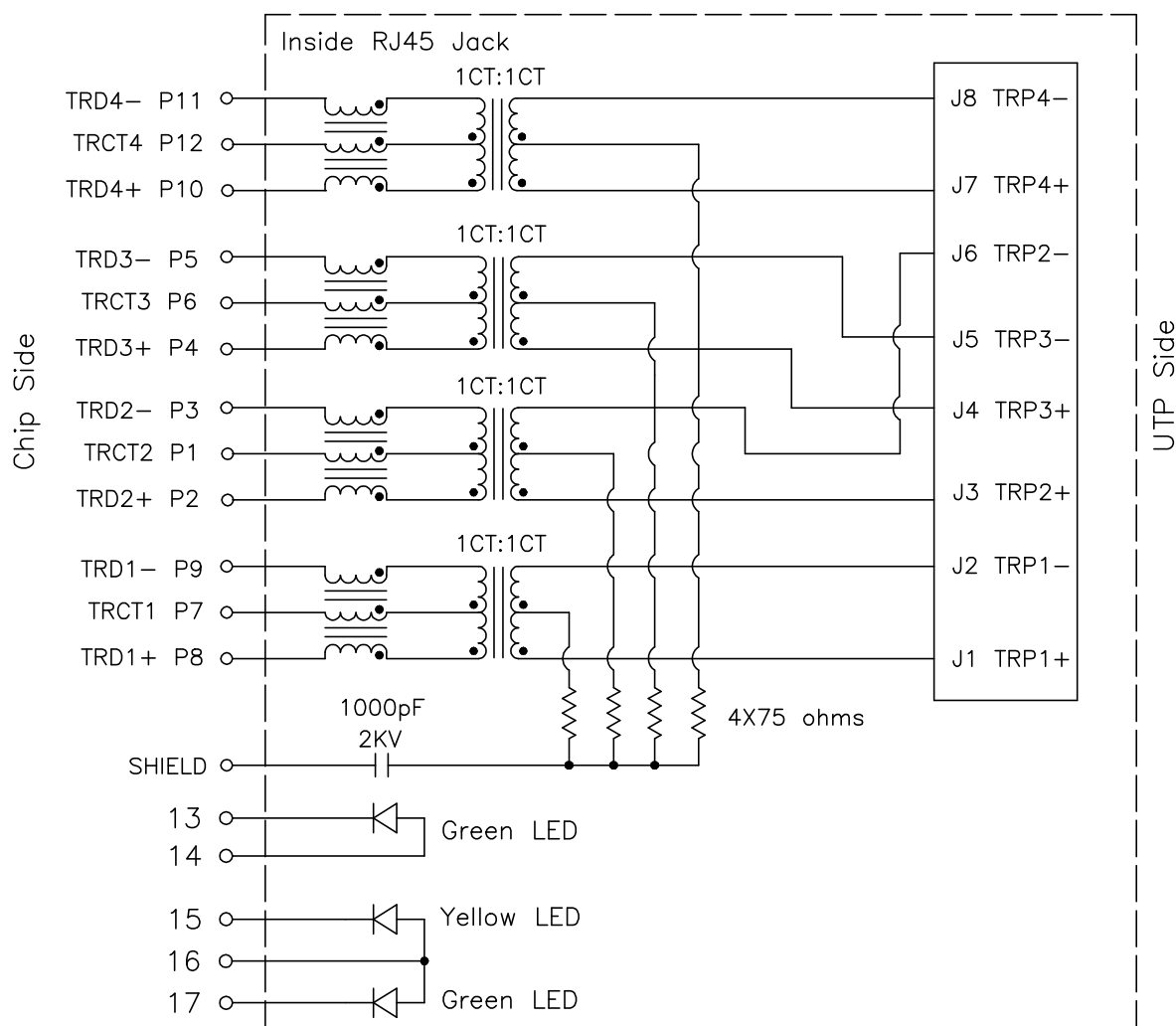
HR911025C

Commercial standards, specifications and Summary:

RoHS Compliant (Pb Free)

Meets or Exceeds IEEE802.3an standards

High performance for EMI suppression, Crosstalk, Return Loss and Consistent Electrical

Minimum 2250VDC isolation per IEEE802.3 requirement

UL Recognized Component: File # E330599

Material Specification:

Housing: PA46 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
LED Conductor: PC Transparent UL94V-0

Mechanical Performance:

Mating force: 5 lbs Maximum
Unmating force: 5 lbs Maximum
Plug to Jack Retention force: 12 lbs Minimum
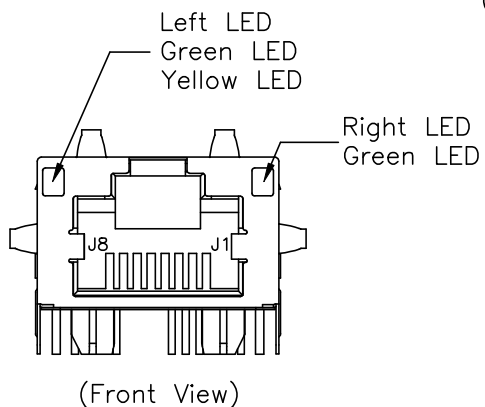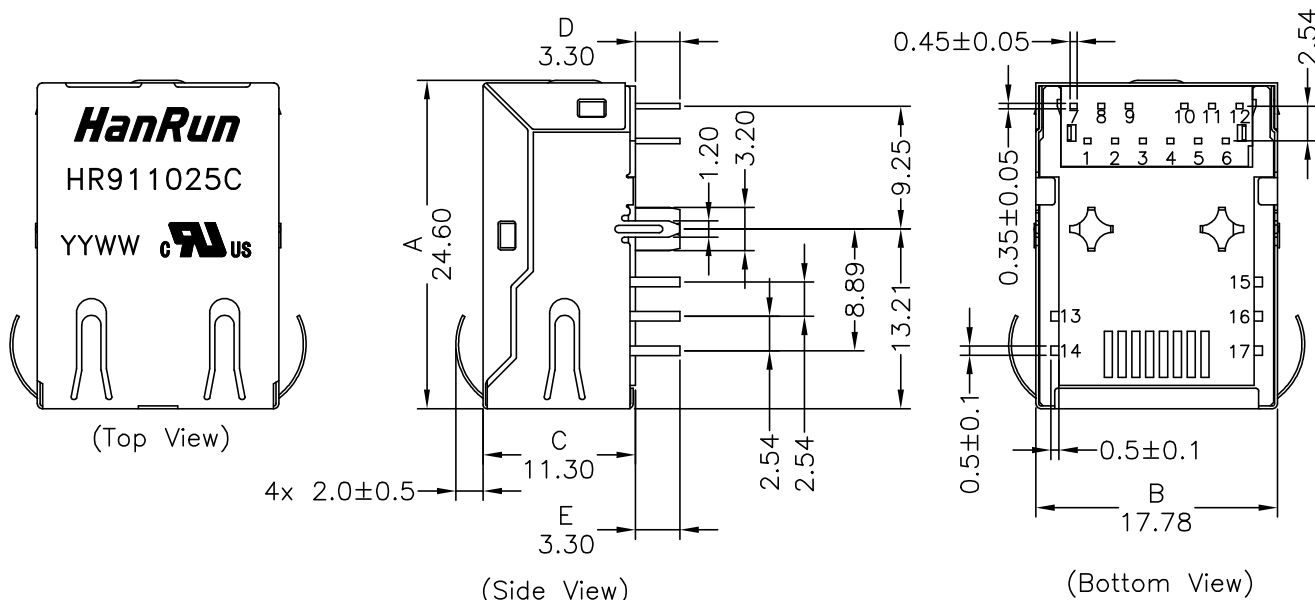Operating life: 750 Cycles Minimum

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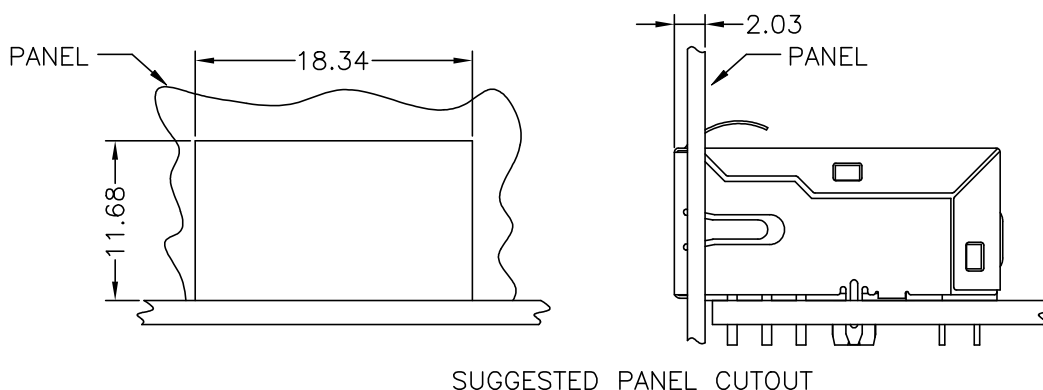
Operating Temperature Range: 0°C ~ +70°C
Storage Temperature Range: -40°C ~ +85°C

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

HanRun Electronics Company Limited

HR911025C

Mechanical Dimensions:

HanRun
HR911025C
YYWW cULus

(Top View)

D 3.30
A 24.60
C 11.30
4x 2.0±0.5
E 3.30

1.20
3.20
9.25
8.89
13.21
2.54
2.54

(Side View)

0.45±0.05
2.54
0.35±0.05
0.5±0.1
0.5±0.1
B 17.78

(Bottom View)

Left LED
Green LED
Yellow LED
Right LED
Green LED

J8   J1

(Front View)

Standard LED	Wavelength	Forward V (Min/Max)	Forward A	Type
Green/Yellow	569nm/585nm	1.8V/2.8V	20mA	squareness
Green	569nm	1.8V/2.8V	20mA	squareness

PANEL   18.34
11.68

2.03
PANEL

SUGGESTED PANEL CUTOUT

Dimensions in mm

Unless otherwise specified, Tolerance: .xx ±0.25

REV.: 00

Address: No.16, Industrial Road Central, Industrial Zone, Xiaolan Town,
Zhongshan City, Guangdong Province, China
Tel: (0760)86103511 86103508 Fax: (0760)86103686 Post code: 528416
E-Mail: sales@hanrun.com   http://www.hanrun.com

HanRun®
Electronics Company Limited

HR911025C
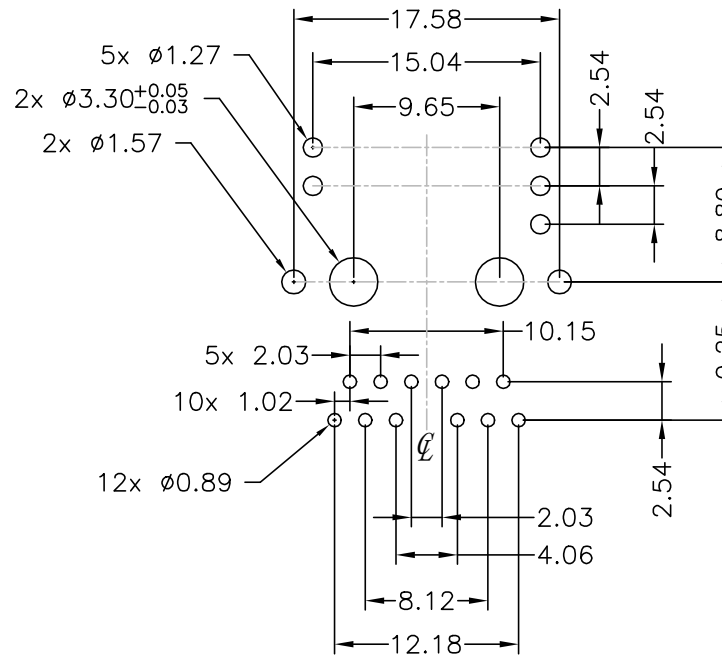
PCB Layout:

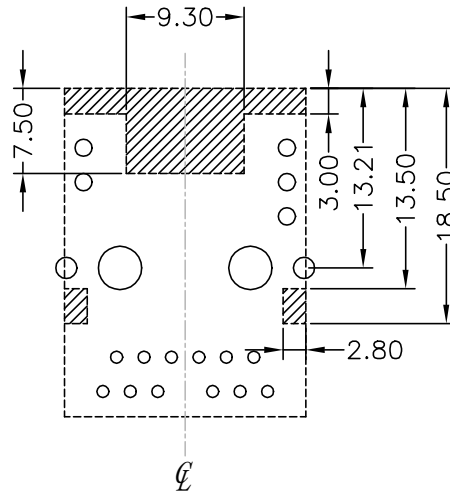
Recommended PCB layout (Component Side View)
Component side PCB thickness: 1.60mm
All dimension tolerance are ±0.08 unless otherwise specified

HanRun®
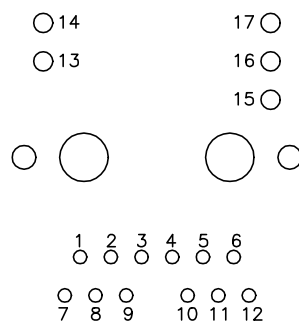Electronics Company Limited

HR911025C

Keep-Out Area:

Component Side View

NOTES:
THE SHADED AREA ON THE CUSTOMER BOARD ARE
RECOMMENDED TO CLEAR OFF ANY VIA HOLE OR
COMPONENT PAD

Pin Assignments:

○14   17○
○13   16○
             15○

1 2 3 4 5 6
○ ○ ○ ○ ○ ○

○ ○ ○   ○ ○ ○
7 8 9   10 11 12

PIN ASSIGNMENTS
(COMPONENT SIDE VIEW)