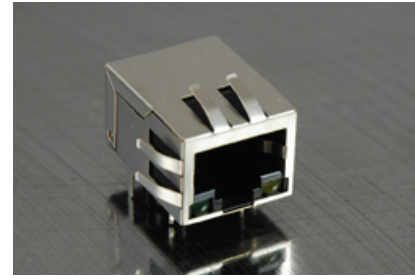




Single Port RJ45 Connector

AR1015-1221I

- 100 Base-T Ethernet Application
- Meets IEEE 802.3 & ANSI X 3.263 standards
- Impedance: 100Ω
- Wave solder capable to 265°C
- Industrial operating temp: -40°C to ±85°C



Electrical Specifications @ 25°C

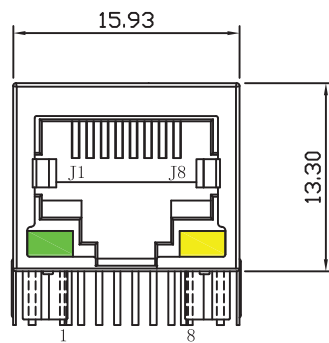
| Part Number  | OCL(μH Min)<br>@ 100kHz, 0.1V<br>With 8mA DC Bias | Turns Ratio<br>chip: cable<br>(±3%) | Insertion Loss<br>(dB Max) |           | Return Loss<br>(dB Min) |            |
|--------------|---|-------------------------------------|----------------------------|-----------|-------------------------|------------|
|              |   |                                     | 0.5-100MHz                 | 0.5-30MHz | 30.1-60MHz              | 60.1-80MHz |
| AR1015-1221I | 350   | 1CT:1CT                             | 1.1                        | -18       | -18-20*log(f/30)        | -12        |

Electrical Specifications @ 25°C

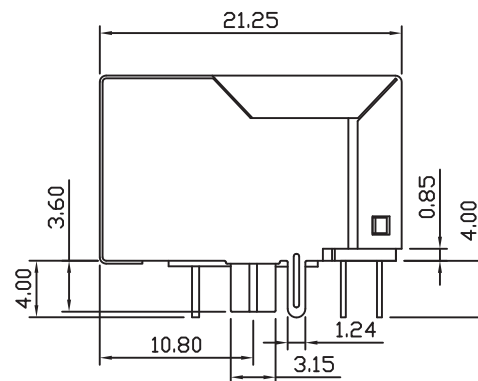
| Part Number  | EMI<br>Fingers | LED<br>(L/R) | Cross Talk<br>(dB Min) |                  | CMRR<br>(dB Min)<br>0.5-100MHz | HI-POT<br>VRMS |
|--------------|----------------|--------------|------------------------|------------------|--------------------------------|----------------|
|              |                |              | 0.5-40MHz              | 40.1-100MHz      |                                |                |
| AR1015-1221I | NO             | G/Y          | -35                    | -33-20*log(f/50) | -30                            | 1500           |

All specifications subject to change without notice.

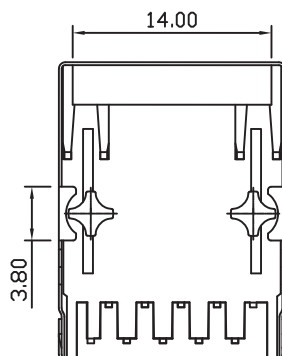
MECHANICAL



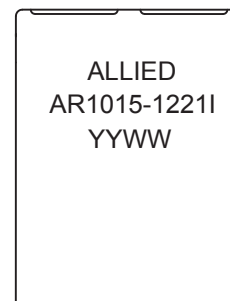
Front Side View



Left Side View



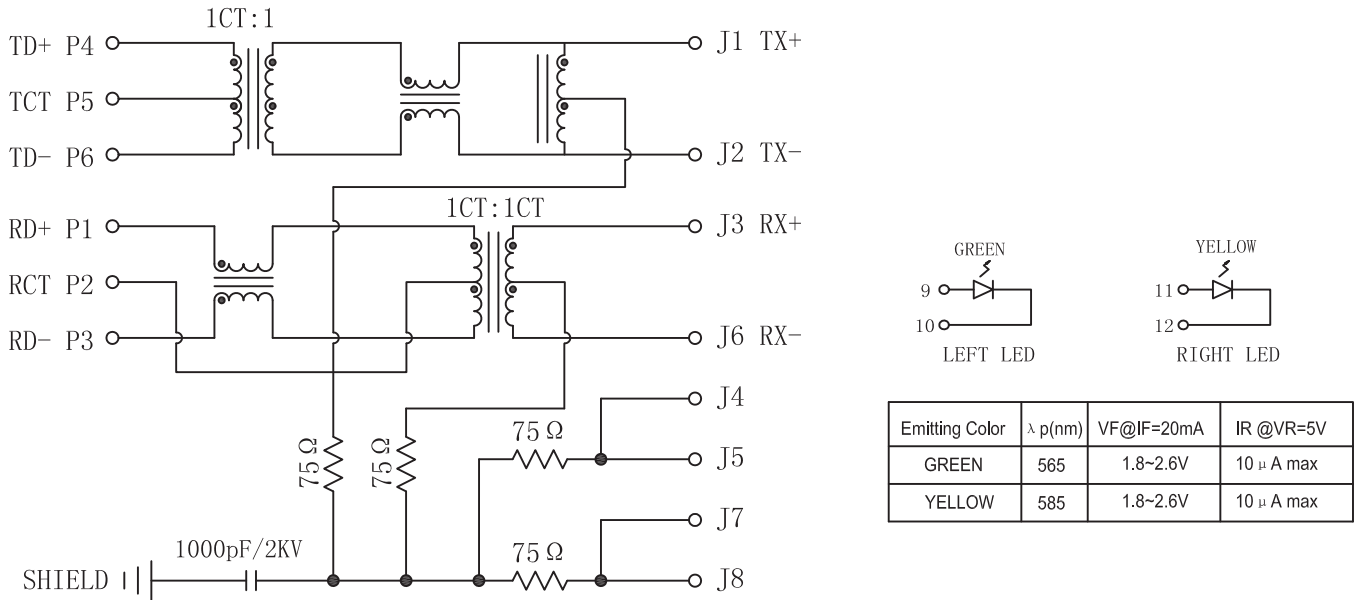
Bottom Side View



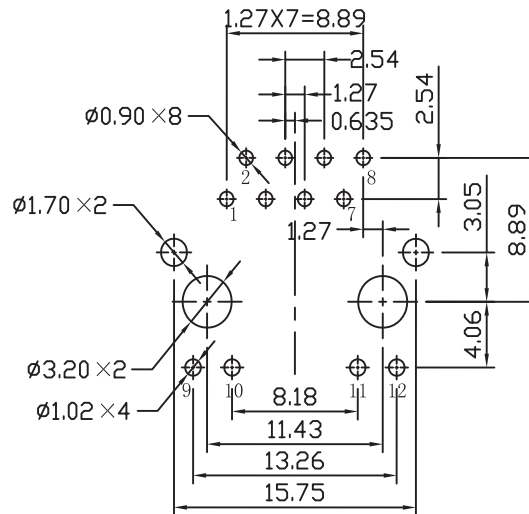
Top Side View



**SCHEMATICS**



**PCB LAYOUT**



**NOTES**

1. Meets IEEE 802.3 specification
2. Connector Materials:  
 Housing Material: Thermoplastic PBT+30%G.F UL94V-0  
 Contact Material: Phosphor Bronze C5210R-EH Thickness=0.35mm  
 Pins: Brass C2680R-H Thickness=0.35mm  
 Shield: SUS 201-1/2H Thickness=0.2mm  
 Contact plating: Gold 6 micro-inches min. In contact area.
3. Wave solder tip temperature: 265°C Max, 5 Sec Max