



## 1X4 RJ45 Connector

AR14-3921I

- 100/1000 Base-T Gigabit for Ethernet Application
- With Green and Yellow LEDs
- RJ45 jack cavity conforms to FCC rules and regulations Part 68, SUB Part F
- Industrial Operating Temp: -40°C to +85°C



## Electrical Specifications @ 25°C

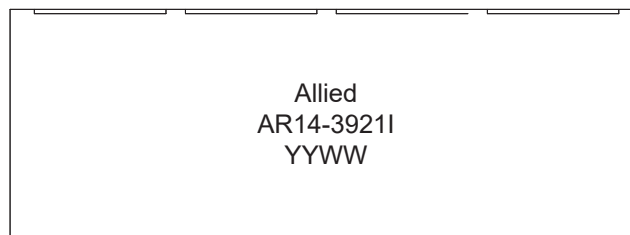
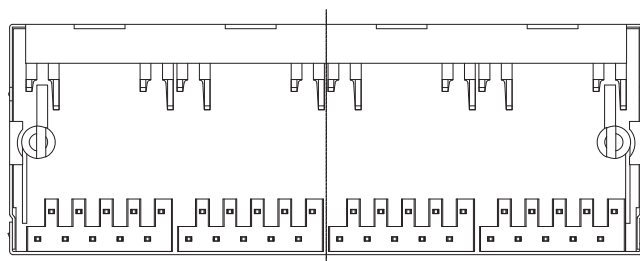
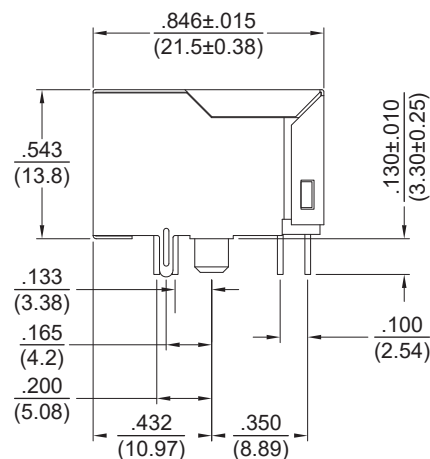
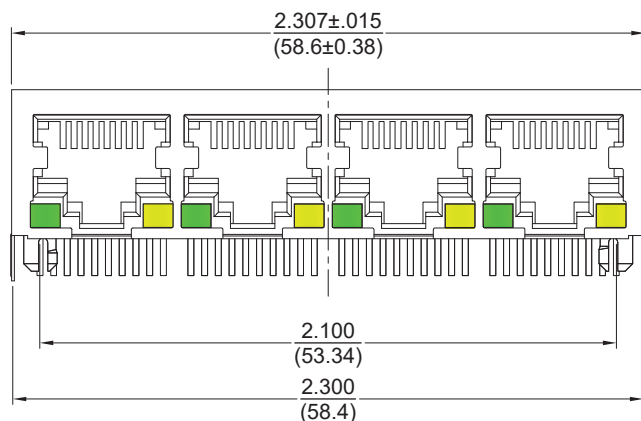
| OCL(μH Min)<br>@ 100kHz, 0.1V | Turns Ratio<br>Chip : Cable<br>(±2%) | Insertion Loss<br>(dB Max) | Return Loss<br>(dB Min) |                    |          |
|-------------------------------|--------------------------------------|----------------------------|-------------------------|--------------------|----------|
| With 8mA DC Bias              |                                      | 1-100MHz                   | 1-30MHz                 | 30-60MHz           | 60-80MHz |
| 350                           | 1 : 1                                | -1.0                       | -18                     | -18-20Log(F/30MHz) | -12      |

## Electrical Specifications @ 25°C

| Cross Talk<br>(dB Min) |       |       |       |        | CMR<br>(dB Min) |       |       |       |        | CDMR<br>(dB Min) |       |       |       |        | HI-POT<br>(Vrms)<br>0.5mA/2Sec. |
|------------------------|-------|-------|-------|--------|-----------------|-------|-------|-------|--------|------------------|-------|-------|-------|--------|---------------------------------|
| 0.5-1MHz               | 10MHz | 30MHz | 50MHz | 100MHz | 0.3-1MHz        | 10MHz | 30MHz | 60MHz | 100MHz | 0.3-1MHz         | 10MHz | 30MHz | 60MHz | 100MHz |                                 |
| -50                    | -50   | -40   | -35   | -30    | -50             | -47   | -42   | -37   | -30    | -50              | -50   | -50   | -45   | -40    | 1500                            |

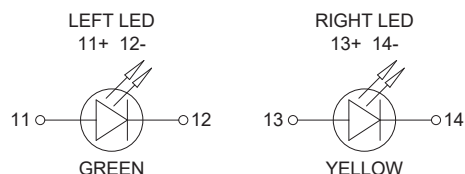
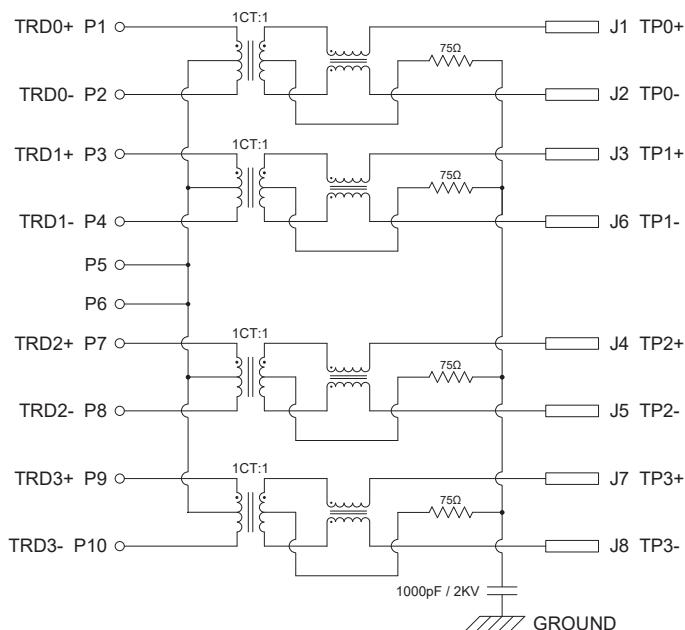
All specifications subject to change without notice.

## MECHANICAL

Dimensions:  $\frac{\text{inch}}{\text{mm}}$ 



## SCHEMATICS

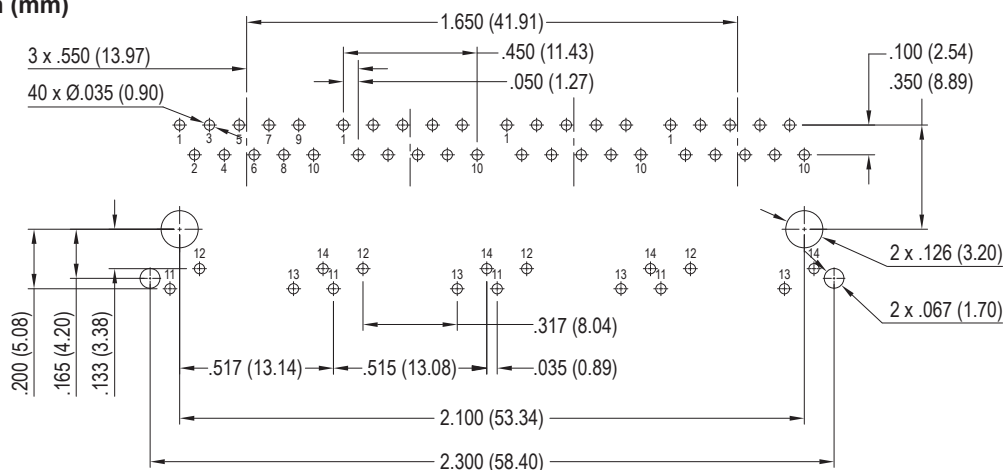


| Standard LED | Wavelength | Forward Voltage |
|--------------|------------|-----------------|
| Green        | 565nm      | 2.6V Max        |
| Yellow       | 585nm      | 2.6V Max        |

\*With a forward current of 20mA

## PCB LAYOUT

Dimensions: inch (mm)



## NOTES

- Shield - 0.25mm Thickness Brass C2680 H  
Plating Nickely 30μ" - 50μH
- Housing - Plastic: Nylon 66, Glass Fiber Filled  
UL94V-0, Color Black
- Contact Pin - Plastic: Nylon 66, Glass Fiber Filled  
UL94V-0, Color Black  
Pin: 0.35 mm Thickness Phosphor Bronze C5210 EH  
Plating: Nickel 30μ"-60μ" For all and Sn 100%  
and Gold Plating 6μ"
- Insert Pin - Plastic: Nylon 66, Glass Fiber Filled  
UL94V-0, Color Black  
Pin: 0.35mm Thickness SUS430  
Plating: Sn all over 30μ"-60μ" Nickel