

- 10/100 Base-T for LAN and other Ethernet Applications
- Designed for PoE applications
- Compliant with IEEE802.3at
- Transmit open circuit inductance (OCL): 350uH (MIN) @ 100KHz, 0.1Vrms with 8mA DC Bias
- RJ45 jack cavity conforms to FCC rules and regulations Part 68, SUB Part F
- Standard Operating Temp: -0°C to +70°C

**Electrical Specifications @ 25°C**

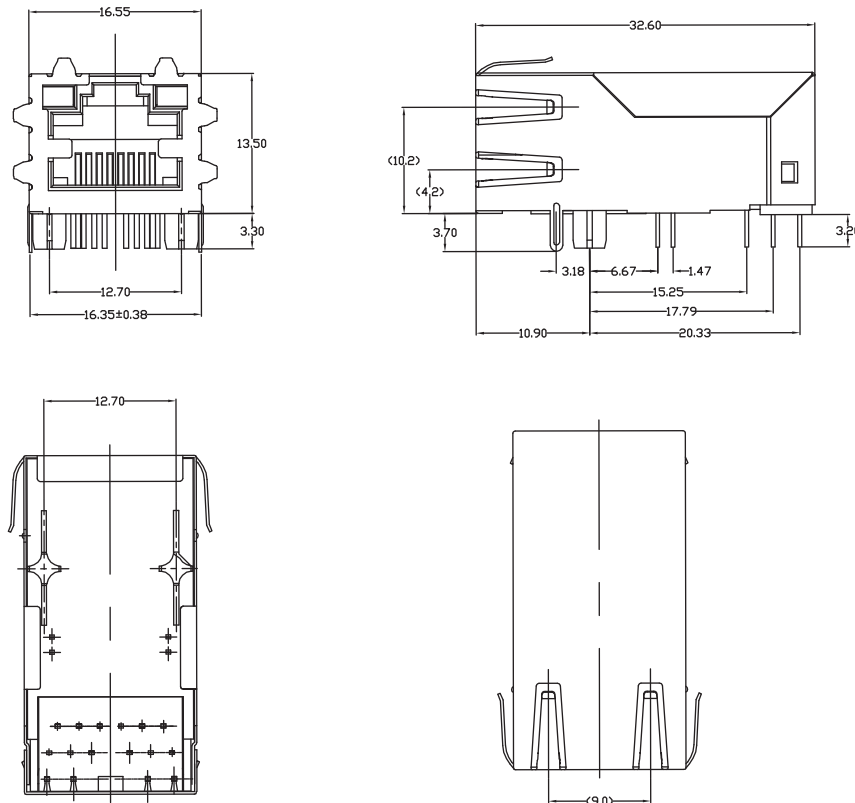
Part Number	OCL(uH Min) @ 100kHz, 0.1V With 8mA DC Bias	Turns Ratio chip: cable ( $\pm 2\%$ )	Cross Talk (dB Min)				HI-POT 1.0mA (V)	
			0.5-10MHz	30MHz	50MHz	100MHz	without capacitance	with capacitance
AR11-3998	350	1CT:1CT	-50	-40	-35	-30	1500	2250

**Electrical Specifications @ 25°C**

Part Number	Insertion Loss (dB Max)		Return Loss (dB Min) @ Load 100 Ohm					CMR (dB Min)
	1-100MHz	100-125 MHz (10/100/100)	1-30MHz	30-50MHz	60MHz	60-80MHz	80-100MHz (10/100/1000)	1-100MHz
AR11-3998	-1.0	-1.2	-18	-16	-14	-12	-10	-30

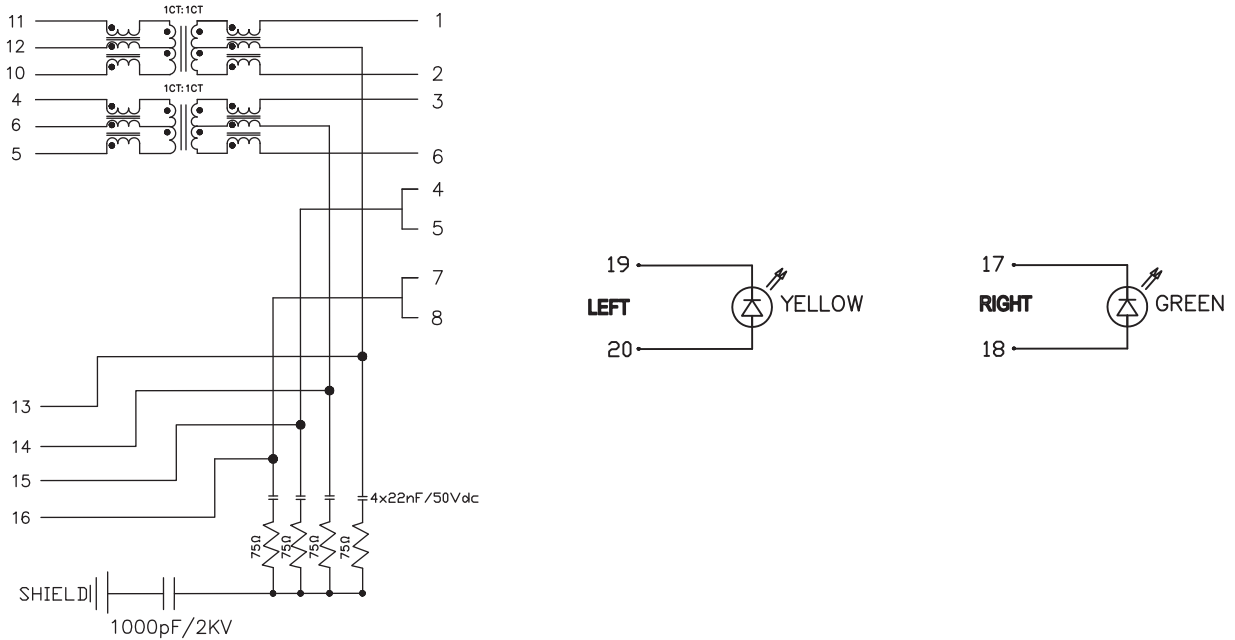
All specifications subject to change without notice.

**MECHANICAL**

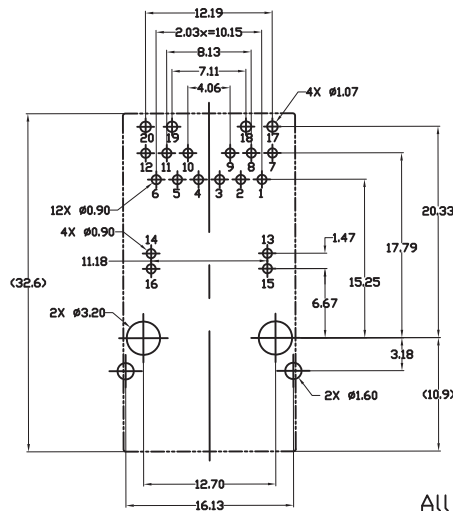




SCHEMATICS



PCB LAYOUT



Suggested PCB Layout  
All dim. tolerance are ±0.05mm.

NOTES

1. Shield- 0.20mm THICKNESS BRASS C2680 H. PLATING NICKEL 20u" Min.
2. Housing- Standard Material Nylon66, Glass filled Polyester UL94V-0 Standard Color Black.
3. RJ Terminal- Plastic: LPC, UL94V-0, Standard Color Black.  
Pin: 0.35mm Thickness Phos-Bronze C5210 EH. Plating: Nickel 40u"-60u" for all and Sn 100%, and 6u" Gold Plating.
4. Input Terminal: Plastic Nylon66, Glass Filled, UL94V-0, Standard Color Black.  
Pin: 0.35mm Thickness SUS430. Plating: Nickel 40u"-60u" for all and Sn 100%.