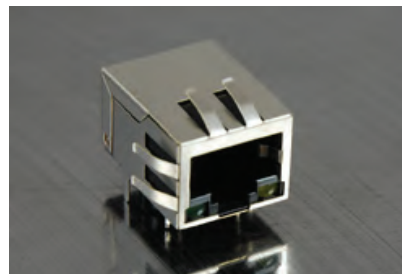




- 10/100 Base-T Ethernet Application
- Meets IEEE 802.3 & ANSI X 3.263 standards
- Impedance: 100OHMS
- Transmit open circuit inductance (OCL): 350uH (MIN) @100KHz  
0.1VRMS with 8mA DC Bias
- Always EU RoHS/ELV Compliant, wave solder capable to 265°C
- Rise Time: 2.5nano-seconds from 10 to 90 percent
- RJ45 jack cavity conforms to FCC rules and regulations Part 68, SUB Part F
- Industrial Temp: -40°C to +85°C
- Contact Factory for Standard Temp.

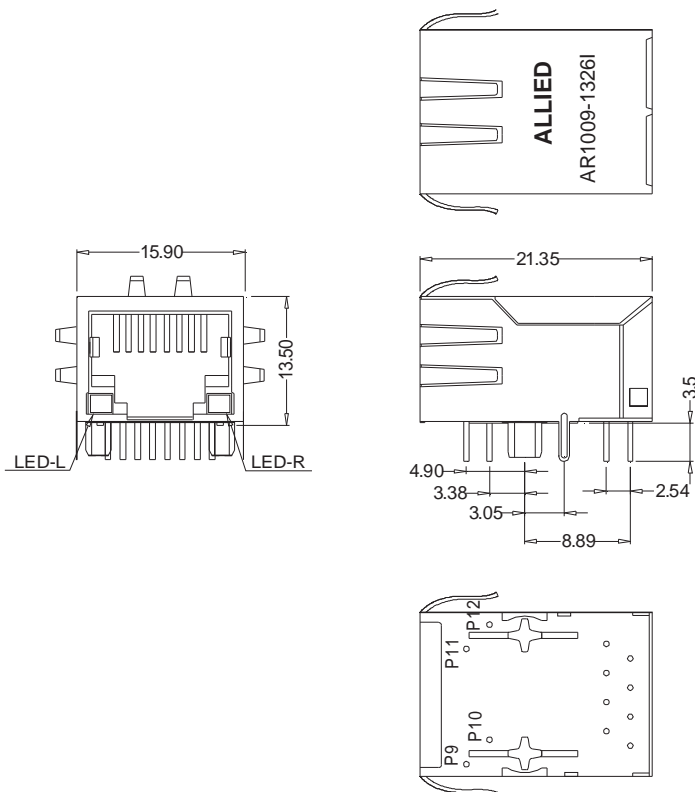


Electrical Specifications @25°C								
Part Number	OCL(uH min) @100KHz/0.1V with 8mA DC Bias	Turns Ratio chip: cable (±3%)	EMI Fingers	LED (L/R)	Insertion Loss (dB Max)	Return Loss (dB Min)		
					0.5-100MHz	0.5-30MHz	30.1-60MHz	60.1-80MHz
AR1009-1326I	350	1CT:1CT	YES	G/Y	1.1	18	18-20*LOG(f/30)	12

Electrical Specifications @25°C				
Part Number	Cross talk (dB Min)		CMRR (dB Min)	HI-POT (VDC)
	0.5-40MHz	40.1-100MHz	0.5-100MHz	
AR1009-1326I	35	33-20*LOG(f/50)	30	2250

All specifications subject to change without notice.

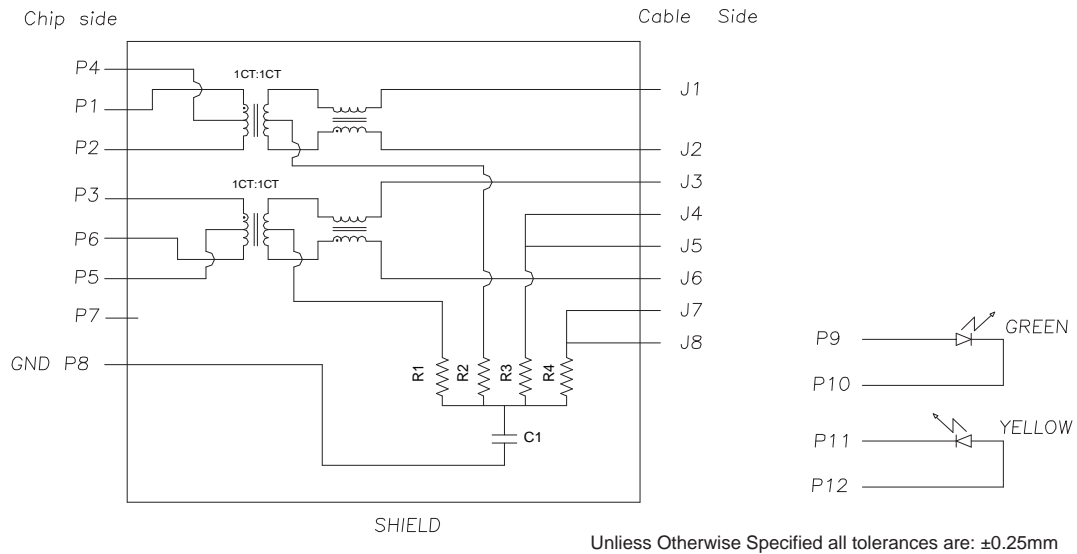
MECHANICAL



Unless otherwise specified all tolerances are: ±0.25 in mm



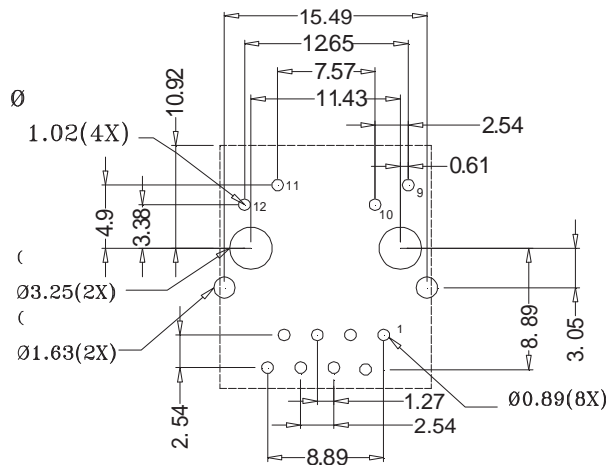
**SCHEMATICS:**



**Notes:**

1. R1-R4=75 Ohms, 1/16W, 5% Resisitors.
2. C1=1000pF, 2KV Decouping Capacitor.
3. LED Compliant with IEC60825-1 Safety of Laser Products when operated up to 20mA.
4. LED Forward Voltage: 2.1V(TYP), LED Power Dissipation: 105mW. LED Peak Wavelength: Green=565nm, Yellow=585Nm

**PCB Layout:**



All Dimensions Tolerances Unless Otherwise Specified are:  $\pm 0.05\text{mm}$

**Materials and Finish:**

- Housing: PBT, Flammability Rating 94V-O.
- Shell: C2680 Brass, 0.25mm thick, 80+150u" nickel plating.
- Mod Jack Contact: Phospher Bronze, 0.35mm thick, Gold Plated.
- LED: Diffused Epoxy Lens, 0.5x0.5mm Carbon Steel wireframe leads.