



RJ45 SINGLE PORT WITH MAGNETICS

- 1000 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
- Standard operating temp: 0°C to +70°C (see footnote)
- Industrial operating temp: -40°C to +85°C (see footnote)

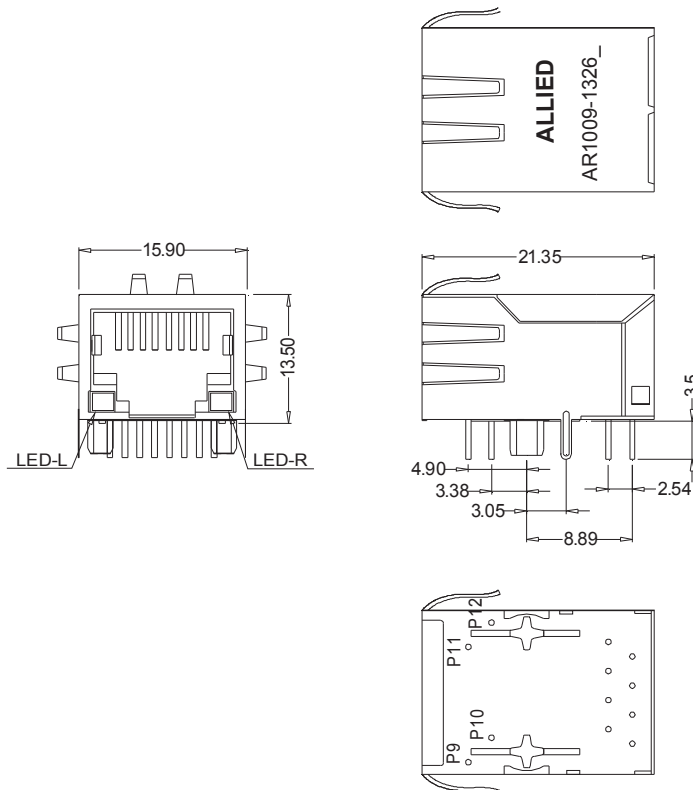
Electrical Specifications @25°C								
Part Number	OCL(μH min) @100KHz/0.1V with 8mA DC Bias	Turns Ratio chip: cable (±3%)	EMI Fingers	LED (L/R)	Insertion Loss (dB Max)	Return Loss (dB Min)		
						0.5-100MHz	0.5-30MHz	30.1-60MHz
AR1009-1326_	350	1CT:1CT	YES	G/Y	1.1	18	18-20*LOG(f/30)	12

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	
AR1009-1326_	35	33-20*LOG(f/50)	30	2250

*Complete part number by inserting "S" for Standard Temp. or "I" for Industrial Temp.

All specifications subject to change without notice.

MECHANICAL

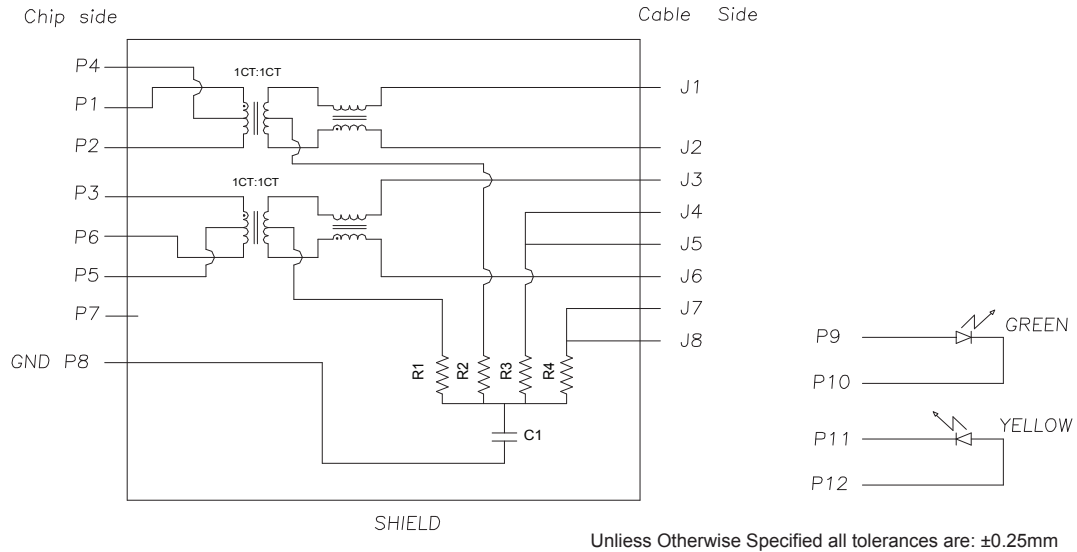


Unless otherwise specified all tolerances are: ± 0.25 in mm



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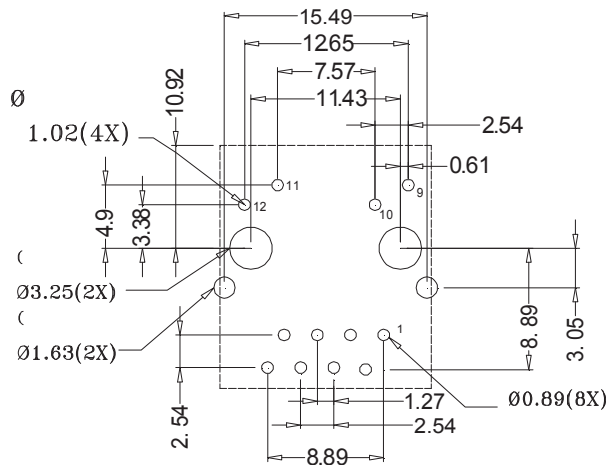
SCHEMATICS:



Notes:

1. R1-R4=75 Ohms, 1/16W, 5% Resisitros.
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.