



## Single Port RJ45 CONNECTOR WITH INTEGRATED MAGNETICS, TAB UP

- 10/100 Base-T Ethernet Application
- Meets IEEE 802.3 & ANSI X 3.263 standards for 100Base-T
- 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
- 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	Turns Ratio chip: cable (±3%)	Insertion Loss (dB Max)		Return Loss (dB Min)	
	With 8mA DC Bias		0.5-100MHz	0.5-30MHz	30.1-60MHz	60.1-80MHz
ARB029-C253	350	1CT:1CT	1.1	18	18-20*log(f/30)	12

### Electrical Specifications @ 25°C

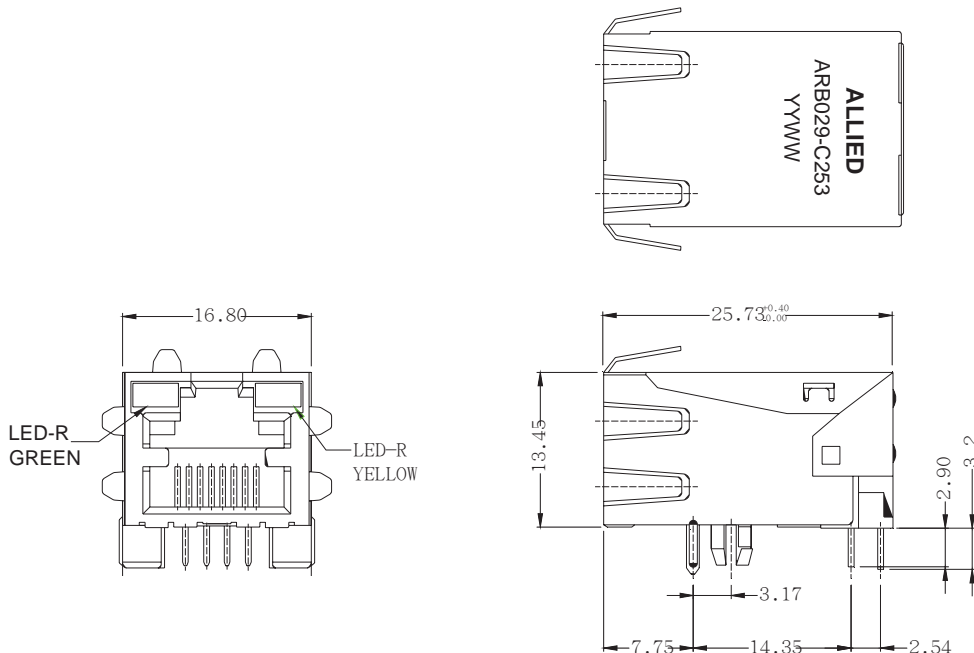
Part Number	EMI Fingers	LED (L/R)	Cross Talk (dB Min)			CMRR (dB Min)		HI-POT (VDC)
			1-30MHz	30-60MHz	60-100MHz	1-50MHz	50.1-150MHz	
ARB029-C253	YES	G/Y	40	35	30	30	20	2250

All specifications subject to change without notice.

## MECHANICAL

ARB029-C253

Unless otherwise specified all tolerances are: ±0.25 in mm

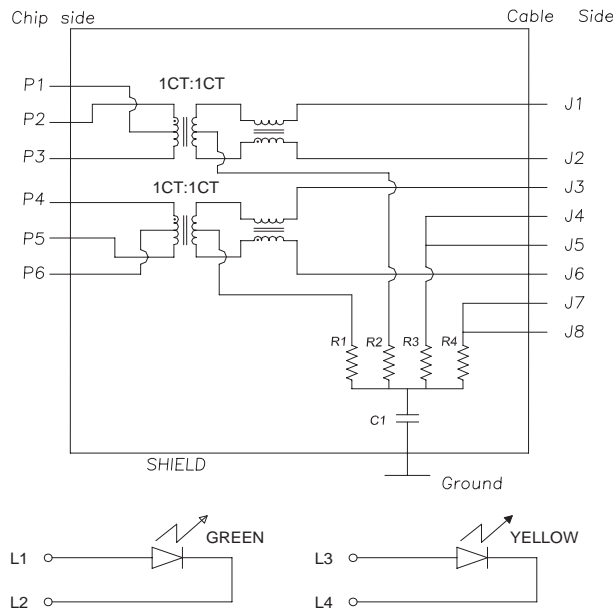




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## SCHEMATICS

ARB029-C253



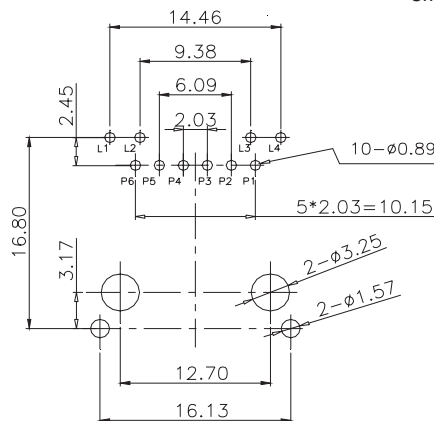
**Notes:**

1. R1-R4=75OHMS,1/16W,5%Resistors.
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

ARB029-C253

*Unless otherwise specified all tolerances are: ±0.05 in mm*



## MATERIALS

ARB029-C253

- **Housing:** PBT, Flammability Rating 94V-O.
- **Shell:** C2680 Brass, 0.2mm thick, Min nickel plating.
- **Mod Jack Contacts:** Phosphor Bronze, 0.35mm thick, plated 15u" Au.
- **LED:** Diffused Epoxy Lens, 0.5x0.5mm Carbon Steel wireframe leads.