



Single Port RJ45 CONNECTOR WITH INTEGRATED MAGNETICS, TAB DOWN

- 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
- RJ45 jack cavity conforms to FCC rules and regulations Part 68, SUB Part F
- Standard Operating Temperature

Electrical Specifications @ 25°C

Part Number	OCL(uH Min) @ 100kHz, 0.1V With 8mA DC Bias	Turns Ratio chip: cable (±3%)	Insertion Loss (dB Max)	Return Loss (dB Min)	
			0.5-100MHz	0.5-40MHz	40.1-100MHz
ARA506-5304	350	1CT:1CT	1.1	18	12-20*log(f/80)

Electrical Specifications @ 25°C

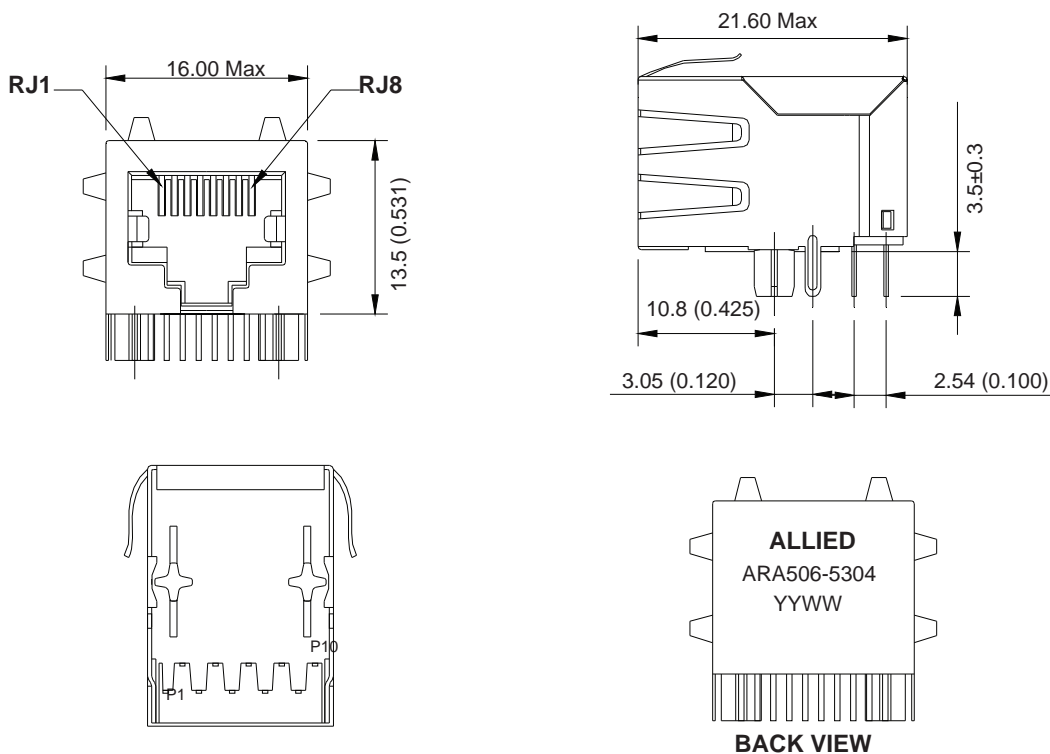
Part Number	EMI Fingers	LED (L/R)	Cross Talk (dB Min)		CMRR (dB Min) 0.5-100MHz	HI-POT (VDC)
			0.5-40MHz	40.1-100MHz		
ARA506-5304	YES	NO	35	33-20*log(f/50)	30	2250

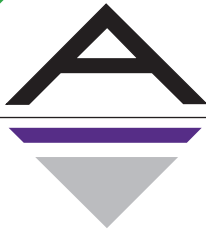
All specifications subject to change without notice.

MECHANICAL

Unless otherwise specified all tolerances are: ±0.25 in mm

ARA506-5304





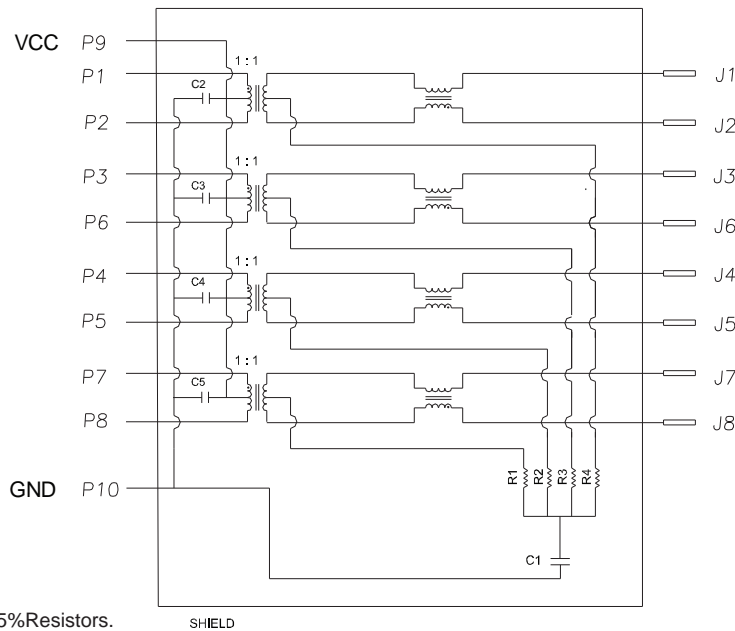
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SCHEMATICS

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Chip side

Cable Side



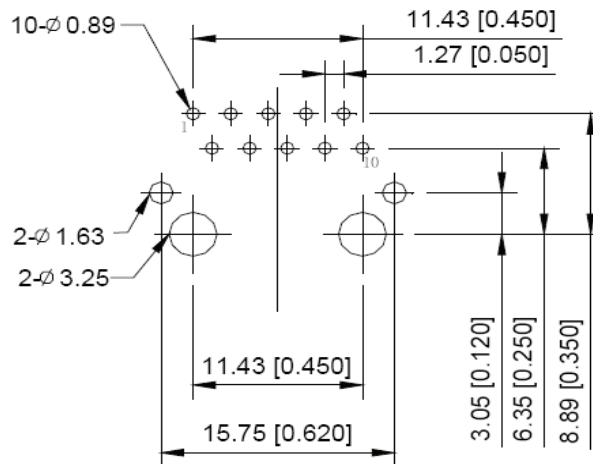
Notes:

1. R1-R4=75OHMS,1/16W,5%Resistors.
2. C1=1000pF,2KV Decoupling Capacitor.
3. C2-C5=0.01uF,50v,X7R Capacitors.

PCB LAYOUT

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Unless otherwise specified all tolerances are: ± 0.05 in mm



MATERIALS

ARA506-5304

- Housing: PBT, Flammability Rating 94V-O.
- Shell: C2680 Brass, 0.2mm thick, 50u" Min nickel plating.
- Mod Jack Contacts: Phosphor Bronze, 30u" Gold plated.