

LAN TRANSFORMERS

10/100 BASE-T | 1G BASE-T | 10G BASE-T ETHERNET

Abracon LAN Transformers support design of discrete ethernet solutions by providing several magnetic circuits including isolation transformers (T), Common Mode Chokes (C) and shunt inductors (S). The ALAN family of ethernet magnetics enables high system throughput by implementing a wide range of data rates from 10 Mbps to 10 Gbps. The ALAN product line is compatible with a wide set of industry standard Ethernet PHY chipsets. Choose the [Abracon RJ45 connectors](#) to develop a complete PHY-to-Cable solution.

APPLICATIONS

- Fast and gigabit Ethernet
- Hubs, servers, switches, router, access points, base stations
- IP cameras, surveillance, and phone
- Industrial computers and robotics
- Networking and communications
- Set top box
- Connected medical equipment
- Test and measurement

10/100 BASE-T (IEEE 802.3u)

PORT COUNT	SERIES	TRANSFORMER TYPE	SCHEMATIC OPTIONS	PACKAGE OPTIONS	INDUCTANCE (μH)	OPERATING TEMPERATURE	ISOLATION (V)	L x W x H (mm)	PIN PITCH (mm)
Single	ALANL100X1	Traditional SMD	T,C	12-Pin SMD	350	0°C to 70°C -40°C to +85°C -40°C to +105°C -40°C to +125°C	1500	12.7 x 71 x 2.1	1.27
	ALANS100X1	Traditional SMD	T,C T,C,S	12-Pin SMD 16-Pin SMD	350	0°C to 70°C -40°C to +85°C -40°C to +105°C -40°C to +125°C -55°C to +125°C	2500	14.8 x 11.7 x 5.0 12.8 x 6.9 x 5.6	2.00 1.27
Discrete	ALANC10001	Chip	T	8-Pin SMD	200	0°C to 70°C -40°C to +85°C	1500	4.5 x 3.2 x 3.5	0.32

1G BASE-T (IEEE 802.3ab)

PORT COUNT	SERIES	TRANSFORMER TYPE	SCHEMATIC OPTIONS	PACKAGE OPTIONS	INDUCTANCE (μH)	OPERATING TEMPERATURE	ISOLATION (V)	L x W x H (mm)	PIN PITCH (mm)
Single	ALANL10001	Traditional SMD	T,C	24-Pin SMD	350	0°C to 70°C -40°C to +85°C -40°C to +105°C -40°C to +125°C	1500	19.8 x 16.6 x 2.5	1.27
	ALANS10001	Traditional SMD	T,C T,C,S	24-Pin SMD	350	0°C to 70°C -40°C to +85°C -40°C to +105°C -40°C to +125°C	2500	14.0 x 15.5 x 5.7 18.4 x 12.4 x 6.5	0.99 1.27
Dual	ALANS10002	Traditional SMD	T,C T,C,S	48-Pin SMD 50-Pin SMD	350	0°C to 70°C -40°C to +85°C -40°C to +105°C -40°C to +125°C	2500	27.8 x 12.2 x 7.2 27.9 x 7.54 x 8.6	1.02
Discrete	ALANC10001	Chip	T	8-Pin SMD	200	0°C to 70°C -40°C to +85°C	1500	4.5 x 3.2 x 3.5	0.32

10G BASE-T (IEEE 802.3an)

PORT COUNT	SERIES	TRANSFORMER TYPE	SCHEMATIC OPTIONS	PACKAGE OPTIONS	INDUCTANCE (μH)	OPERATING TEMPERATURE	ISOLATION (V)	L x W x H (mm)	PIN PITCH (mm)
Single	ALAN-516	Traditional SMD	T,C	24-Pin SMD	100	0°C to 70°C -40°C to +85°C	1500	15.3 x 13.8 x 6.3	0.99

T: Transformer

C: Common Mode Choke

S: Shunt Inductor