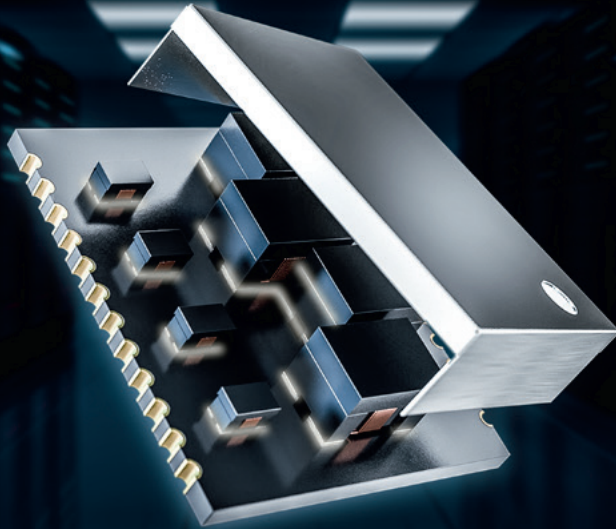


LANtastic Automation!



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#LANAQ



Curious how the WE-LAN AQ is built inside?
Discover our new 3D online application and
get more information:

www.we-online.com/lantastic



The **WE-LAN AQ** is a LAN transformer manufactured by a fully automated production process. Its innovative coil winding technique reduces the electrical variation and increases their reliability, while improving performance over a wide frequency range. LAN transformers and RJ45 connectors suitable for different speeds and PoE current ratings can also be found in the further LAN product families.

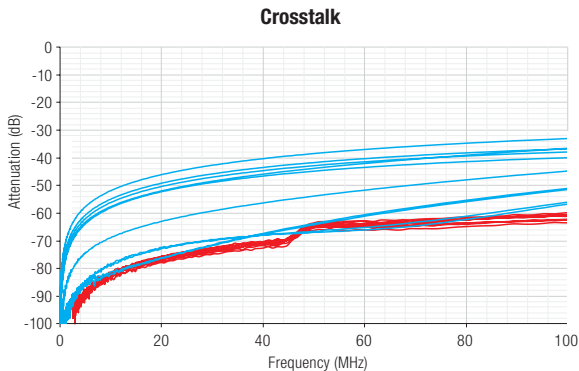
- >1.5 kV isolation voltage
- IEEE compliant
- Tight tolerance
- Compact design: max 4.5 mm height
- 10/100 & 10/100/1000 Base-T

WE-LAN AQ

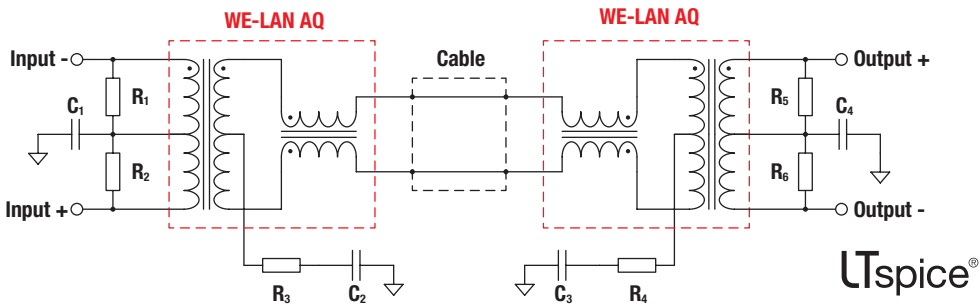
Characteristics

- Reducing the electrical variation
- Increasing the reliability
- Improving performance over a wide frequency range

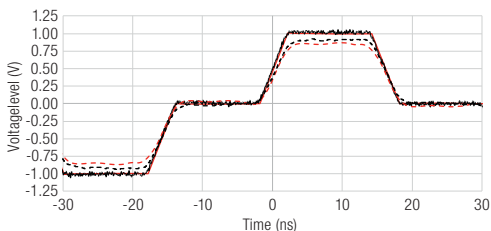
— WE-LAN AQ
— Common LAN Transformers



Accurate Spice Simulation

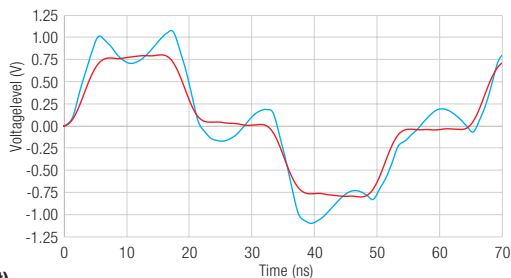


Simulation vs. Real Measurement



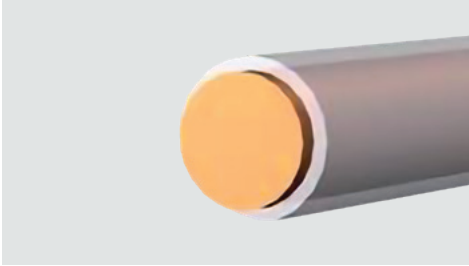
— Input (simulation) — Input (measurement)
-- Output (simulation) -- Output (measurement)

Simulation with Common Mode Noise



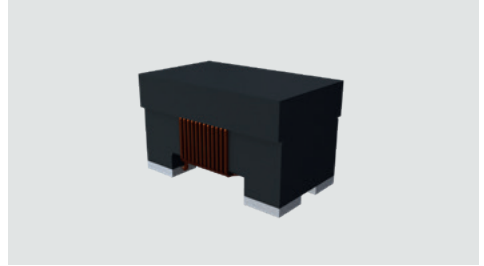
— Signal without WE-LAN AQ — Signal with WE-LAN AQ

Innovative Design



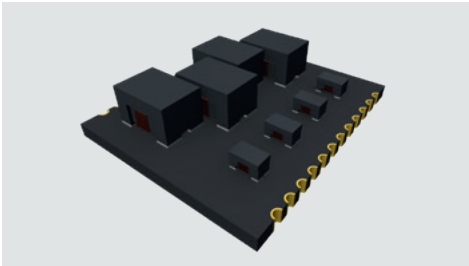
IEEE 802.3 compliant

- Isolation voltage of 1.5 kV
- Compatibility with IEEE standards



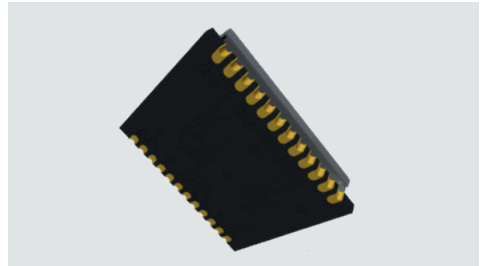
Machine-wound T-Bone core

- Tight tolerance
- High production quality



Fully automated manufacturing

- Reduced electrical variation
- Increased reliability
- Accurate matching of data lines



Gold plated half vias and pads on the bottom side

- Improved solderability & AOI inspection
- Pad compatible to standard parts



Cover

- Pick & Place

Tests for all products, e.g.:

- 10 g's vibration
- 5 times reflow

Signal Transformers

Product Overview

WE-LAN AQ



Order Code	Speed	Ports	Temp. Range
749010310	10/100 Mbit/s	1	-40 to +85°C
749020310	10/100/1000 Mbit/s	1	-40 to +85°C

WE-LAN



Speed	Ports	Temp. Range	PoE	Design Kit
10/100/1000 Mbit/s 2.5/5 Gbit/s	1–4	-40 to +125°C	350–2000 mA	749010, 749119

WE-LAN 10G



Speed	Ports	Temp. Range	PoE	Design Kit
10 Gbit/s	1	-40 to +85°C	350–1500 mA	749010, 749119

WE-RJ45 LAN



Speed	Ports	Temp. Range	PoE	Mounting Technology	Design Kit
10 - 1000 Mbit/s	1–4	-40 to +85°C	350mA–600 mA	SMT/THT/THR	749945

WE-RJ45 LAN 10G



Speed	Ports	Temp. Range	PoE	Design Kit
10 Gbit/s	1	-40 to +85°C	350–1500 mA	749945

