



Bourns Releases New Automotive Grade 10/100/1000 Base-T Chip LAN Transformer


Model SM453229A-381N7Y

Riverside, California – December 10, 2021 – Bourns Magnetics Product Line is releasing the new automotive grade [Model SM453229A-381N7Y 10/100/1000 Base-T Chip LAN Transformer](#). Unlike traditional LAN magnetics built with multiple toroidal core transformers and common mode chokes assembled in a single module, this chip LAN transformer is a discrete, center-tapped component wound on a drum core and capped with a ferrite plate to emulate the result of the close magnetic path of a toroid core. The common mode chip inductor [Model SRF2012A-801Y](#) is paired with the chip LAN transformer to provide EMI suppression. The discrete transformer / common mode chip inductor arrangement offers a high degree of flexibility in a PCB layout.

The Model SM453229A-381N7Y 10/100/1000 Base-T Chip LAN Transformer is AEC-Q200 compliant and IEEE 802.3 Ethernet compatible with an expanded operating temperature range of -40 to +105 °C. It is ideal for use in LAN interfaces for a variety of telecommunication and network devices.

Please visit the [Bourns website](#) for additional information and contact [Bourns Customer Service](#) if you have any questions.

Features

- IEEE 802.3 Ethernet compatible
- 10/100/1000 Base-T compatible
- Discrete transformers and common mode chip inductors for flexible PCB layout
- Pairing common mode chip inductors for EMI reduction
- Expanded temperature range: -40 to +105 °C
- RoHS compliant* and halogen free**
-  **AUTOMOTIVE**
GRADE

Applications

- Ethernet
- Telecommunication and network devices

*RoHS Directive 2015/863, Mar 31, 2015 and Annex.

**Bourns considers a product to be "halogen free" if (a) the Bromine (Br) content is 900 ppm or less; (b) the Chlorine (Cl) content is 900 ppm or less; and (c) the total Bromine (Br) and Chlorine (Cl) content is 1500 ppm or less.