BOURNS®

NEW PRODUCT RELEASE

TRANSFORMERS

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Bourns Releases New Gigabit Ethernet / PoE+ Chip-LAN Transformers

Model SM453230-121N7YP and SM453230-231N7YP

Riverside, California – December 14, 2021 – Bourns Magnetics Product Line is introducing the new Model SM453230-121N7YP Gigabit Ethernet / PoE+ Chip LAN ~~1G/2.5G/5G~~ 10G and Model SM453230-231N7YP Gigabit Ethernet / PoE+ Chip-LAN ~~10G~~ 1G/2.5G/5G Base-T Transformers. Unlike traditional LAN magnetics built with multiple toroidal core transformers and common mode chokes in a single module, the 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. A common mode chip inductor is paired with a 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 SM453230-121N7YP and Model SM453230-231N7YP Gigabit Ethernet Chip-LAN Transformers are IEEE 802.3 Ethernet compatible and PoE+ (700 mA) capable, with an expanded operating temperature range of -40 to +85 °C. They are ideal for use in LAN interfaces for a variety of high-speed telecommunication and network devices.

Model	Size (mm)	Bit Rate	Pairing Common Mode Chip Inductor
SM453230-121N7YP	4.7 x 3.3 x 2.9	10G	SRF2012-900YA
SM453230-231N7YP	4.7 x 3.3 x 2.9	1G / 2.5G / 5G	SRF2012A-801Y

For additional details, visit www.bourns.com/products/magnetic-products/transformers-chip-lan.

If you have any questions or need additional information, please feel free to contact Customer Service / Inside Sales.

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Features

- IEEE 802.3 ethernet compatible
- Compatible with 1G/2.5G/5G/10G Base-T
- PoE+ capable
- Discrete transformers and common mode chip inductors for flexible PCB layout
- Pairing common mode chip inductors for EMI reduction
- Expanded temperature range: -40 to +85 °C
- RoHS compliant* and halogen free**

Applications

- High speed 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.*