



Bourns Releases AEC-Q200 Compliant, Automotive Grade High Creepage/Clearance Distance Isolation Power Transformers

Model HCT8xxxxEAL Series

Riverside, California – June 4, 2024 – Bourns Magnetics Product Line is introducing the second generation High Clearance / Creepage Distance Isolation Power Transformer [HCT8xxxxx EAL Series](#). These push-pull high voltage isolation transformers deliver 3.3 or 5 V input to various output voltages per turn (up to 350 mA in various turns ratio configurations) in a compact size. These transformers are designed for isolation applications in Automotive Battery Management Systems (BMS), RS-485, CAN Interface, Digital Input Module and RS-323 Isolation.

Utilizing a fully automated line for high quality and high reliability, the HCT8xxxxx EAL Series is designed with overmolding technology by using FIW wire for low cost and high efficiency. Meanwhile, the reinforced isolation with 8 mm minimum clearance/creepage distance provides an elevated degree of isolation from high voltage hazards.

These new transformers are designed for isolation power supplies using Texas Instruments Models SN6501 and SN6505, and are compliant with IEC 62368-1 and IEC 61558-1 standards.

Series	L (μH)	Size (mm)	Working Voltage (V)	Creepage Distance (mm)	Clearance Distance (mm)
HCT8xxxxEAL	160	15.2 x 10.6 x 8.0	1000	Min. 8.0	Min. 8.0

Features

- Overmolding technology with fully automated manufacturing
- Complies with IEC 62368-1 and IEC 61558-1 standards
- Reinforced insulation for working voltage of 800 V_{rms} and basic insulation for 1000 V_{rms}
- Designed for isolation power supplies using TI Model SN6501 and SN6505
- AEC-Q200 compliant
- RoHS* and REACH compliant
- AUTOMOTIVE GRADE

Applications

- Automotive BMS
- RS-485
- CAN interface
- Digital input modules
- RS-323 isolation

For additional details on Bourns® transformers, visit the Bourns Magnetics Technical Library at www.bourns.com/resources/technical-library/library-documents/magnetic-products-technical-library. Should you have any questions, contact [Bourns Customer Service/Inside Sales](#).

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