



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

### *Model HCTSM110103HAL*

Riverside, California – July 10, 2023 – Bourns Magnetics Product Line is pleased to introduce the new [Model HCTSM110103HAL](#) AEC-Q200 Compliant, Automotive Grade, High Clearance / Creepage Distance Isolation Power Transformer. This high voltage isolation transformer is driven by 3.3 – 5 V input, delivers 3.3 – 15 V up to 350 mA output and, if required, can be configured in a variety of turns ratios.

The Model HCTSM110103HAL transformer is designed to support isolated interface power for CAN, RS-485, RS-422, RS-232, SPI, I<sup>2</sup>C, lower power LANs in a range of applications such as Industry 4.0, and any application that requires isolation from potentially hazardous voltages (e.g., from a high voltage battery in a 1200 volt Energy Storage System).

This HCT power transformer offers a working voltage of up to 1200 VDC and Hi-Pot isolation voltage up to 5000 VAC with an extended operating temperature range of -40 to +125 °C.


The Model HCTSM110103HAL is built with a ferrite toroid core for a high coupling factor and efficiency. The reinforced isolation, 11 mm minimum clearance/creepage distance, and 5 kV @ 60 second withstanding voltage provide an elevated degree of isolation from high voltage hazards. The transformers are designed for isolation power supplies using Texas Instruments' Model SN6501 and SN6505B, and are compliant with IEC/UL 60664-1 and IEC/UL 62368-1 requirements.

Model	OCL (μH)	Size (mm)	Working Voltage (VDC)	Creepage Distance (mm)	Clearance Distance (mm)
HCTSM110103HAL	80 min.	19.6 x 13.5 x 9.6	1200	11 min.	11 min.

IC23042

For additional details on Bourns® HCT transformers, visit the Bourns website at [www.bourns.com/products/magnetic-products/transformers-hct](http://www.bourns.com/products/magnetic-products/transformers-hct). Should you have any questions, please contact [Bourns Customer Service/Inside Sales](#).

### Features

- Complies with IEC/UL 60664-1, IEC/UL 62368-1
- Reinforced insulation for working voltage up to 1200 VDC
- AEC-Q200 compliant
- Hi-Pot voltage up to 5000 VAC
- Creepage distance 11 mm minimum, clearance distance 11 mm minimum
- Designed for isolation power supplies using TI Model SN6501 and SN6505B transformer drivers
- Partial discharge test: 2000 Vrms
- RoHS compliant\*
-  **AUTOMOTIVE**  
GRADE

### Applications

- Battery Management Systems
- Energy Storage Systems
- RS-485
- CAN Interface Digital Input Module
- RS-232 Isolation

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