BOURNS®

NEW PRODUCT RELEASE

MAGNETICS



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

Model HCTSM151207FAL

Riverside, California - February 27, 2026 – Bourns Inductive Components Product Line is introducing the Model HCTSM151207FAL High Clearance/Creepage Distance Isolation Power Transformer. This new transformer is AEC-Q200 compliant and automotive grade. The high voltage isolation transformer is driven by 24 V input and delivers 12 V, up to 100 mA output, and can be configured in a variety of turns ratios if needed.

The transformer is designed to support isolated interface power for CAN, RS-485, RS-422, RS-232, SPI, I^2C and 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 especially inside 1,500 V energy storage systems).

The Model HCTSM151207FAL is built with a ferrite toroid core for high coupling factor and efficiency. It offers a working voltage of up to 1,500 VDC with an operating temperature range from -40 °C to +125 °C. The reinforced isolation, 15 mm min. clearance/creepage distance, and 7.64 kV @ 2 seconds withstanding voltage provide an elevated degree of isolation from high voltage hazards. The transformer is designed for isolation power supplies using Texas Instruments' SN6501 and SN6505B, and are compliant with IEC 60664-1/UL 62368-1and IEC 62368-1 standards.

Model	Primary Inductance (µH)	Size (mm)	Working voltage (VDC)	Creepage distance (mm)	Clearance distance (mm)	Operating Temperature (°C)
HCTSM151207FAL	400 min.	15.0 x 21.3 x 9.6	1,500	15 min.	15 min.	-40 to +125

Please visit the Bourns website at www.bourns.com for additional product details and contact Bourns Customer Service/Inside Sales if you have any questions.

Features

- Working voltage up to 1500 VDC
- Hi-Pot: 7640 VAC, 1 mA, 2 s
- Reinforced insulation
- Clearance/creepage distance >15 mm
- Overvoltage Category II, Pollution Degree 2, up to 2 km above sea level
- IEC 60664-1:2007, IEC/UL 62368-1:2018 and UL 62368-1:2021
- AEC-Q200 compliant
- RoHS compliant*
- AUTOMOTIVE GRADE

Applications

- Energy Storage Systems (ESS)
- High voltage/high current DC meters
- CAN interface digital input modules
- RS-485 and RS-232 isolation
- Designed for isolation power supplies using TI SN6501 & SN6505B

Additional Information

DATA SHEET | PRODUCT SELECTOR | TECHNICAL LIBRARY | INVENTORY | SAMPLES | CONTACT

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

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