



Bourns Releases New AEC-Q200 Compliant, Automotive Grade BMS Signal Transformer

Next-generation Model SM91803AL

Riverside, California – April 11, 2025 – Bourns Magnetics Product Line is pleased to introduce the [Model SM91803AL](#) AEC-Q200 compliant, Automotive Grade BMS Signal Transformer for next-generation applications. This single channel basic insulation transformer is designed with a planar structure for BMS applications.

The Model SM91803AL was developed for use with Analog Device’s LTC6815 series, NXP’s MC33771C series and TI’s Model BQ79616. The Model SM91803AL is manufactured with full automation for improved quality and cost-effectiveness. This BMS transformer offers a working voltage of up to 1000 VDC and Hi-Pot isolation voltage up to 4300 VDC or 2500 VAC with an extended operating temperature range of -40 to +125 °C.

Model	OCL (μH)	Size (mm)	Working Voltage (VDC)	Creepage Distance (mm)	Clearance Distance (mm)
SM91803AL	150 ~ 450	14.0 x 8.5 x 3.8	1000	Min. 5.5	Min. 5.5

For additional details on Bourns® transformers, visit the Bourns website at bourns.com/products/magnetic-products/transformers-bms-aecq200. Should you have any questions, contact [Bourns Customer Service/Inside Sales](#).

Features

- Planar technology for BMS Signal applications
- Working voltage up to 1000 VDC
- Hi-Pot: 4300 VDC or 2500 VAC
- Basic insulation in compliance with IEC 60664-1/IEC 61558-1/IEC 62368-1
- Clearance distance >5.5 mm, Pollution degree 2, Material group CTI I
Creepage distance >5.5 mm, Overvoltage Category II
- Partial discharge level up to 1200 V per IEC 60664
- Expanded temperature range: -40 to +125 °C
- AEC-Q200 compliant
- RoHS compliant*
- AUTOMOTIVE GRADE

Applications

- Battery Management Systems
- Energy Storage Systems

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