



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

Model SM91806AL

Riverside, California – January 9, 2024 – Bourns Magnetics Product Line is pleased to introduce the [Model SM91806AL AEC-Q200 compliant, Automotive Grade BMS \(Battery Management System\) Signal Transformer](#) for next generation applications. This single-channel basic insulation transformer has a planar structure and is designed for BMS applications.

The Bourns® Model SM91806AL BMS Planar Transformer was developed for use with Analog Device’s Model LTC6815 Series, NXP’s Model MC33771C Series and Texas Instruments’ Model BQ79616. This BMS transformer offers a working voltage of up to 1000 VDC and Hi-Pot isolation voltage up to 4300 VDC or 3000 VAC with an extended operating temperature range of -40 to +125 °C. Additionally, Bourns’ automated manufacturing process has further improved the quality and cost-effectiveness of this transformer.

Model	OCL (μH)	Size (mm)	Working Voltage (V)	Creepage Distance (mm)	Clearance Distance (mm)
SM91806AL	150 ~ 450	17.4 x 8.5 x 5.5	1000	Min. 8.2	Min. 8.2

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

Features

- Planar technology for BMS signal applications
- Working voltage: up to 1000 VDC
- Hi-Pot: 4300 VDC or 3000 VAC
- Basic insulation compliant with IEC 60664-1/61558-1/62368-1 standards
- Clearance distance >8.2 mm, pollution degree 2, material group CTI I
- Creepage distance >8.2 mm, Overvoltage Category II
- Partial discharge level up to 1200 V per IEC 60664
- Expanded temperature range: -40 to +125 °C
- RoHS compliant* and Halogen free**
- AEC-Q200 Compliant
- AUTOMOTIVE GRADE

Applications

- Battery Management Systems (BMS)
- Energy Storage Systems (ESS)

* 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.