BOURNS®

NEW PRODUCT RELEASE

MAGNETICS



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

Model SM91581AL

Riverside, California - September 11, 2026 – The Bourns® Model SM91581AL is an AEC-Q200 compliant, automotive grade signal transformer designed for single-channel reinforced insulation in battery management system (BMS) applications. Its 1,800 VDC working voltage (reinforced insulation) and 8,400 VDC Hi-Pot isolation rating allow communication through high-voltage battery strings, with creepage and clearance distances exceeding 23.7 mm.

Model	Size (mm)	Inductance (µH)	Working Voltage (VDC)	Hi-Pot (VDC)	Operating Temperature (°C)
SM91581AL	31.5 x 12.5 x 9.5	150 - 450	1,800	8,400	-40 to +125

Features

- Hi-Pot: 8400 VDC
- Basic insulation per reinforced insulation IEC 62477-1:2022 & IEC 62477-2:2018, working voltage up to 2500 VDC
- Reinforced insulation per reinforced insulation IEC 62477-1:2022 & IEC 62477-2:2018, working voltage up to 1800 VDC
- Creepage distance >23.7 mm, pollution degree 2, material group CTI I
- Clearance distance >23.7mm, Overvoltage Category II, up to 5000 m above sea level
- AEC-Q200 and RoHS compliant*
- AUTOMOTIVE GRADE

Applications

- Battery management systems (BMS) in hybrid and electric powertrain systems
- Energy storage battery packs with battery management systems

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.

Additional Information

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

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

IC26132

Americas: Tel +1-951 781-5500 americus@bourns.com

EMEA: Tel +36 88 885 877 eurocus@bourns.com

Asia-Pacific: Tel +886-2 256 241 17 asiacus@bourns.com

Mexico: Tel +52 614 478 0400 mexicus@bourns.com