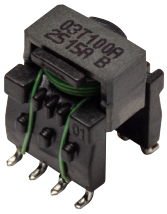
BOURNS®

NEW PRODUCT RELEASE

MAGNETICS



Bourns Releases AEC-Q200 Compliant, Automotive Grade 3 Watt Gate Driver Transformer

Model HVMA03T100A-ST10S

Riverside, California - October 21, 2025 – Bourns Custom Magnetics Product Line introduces the Model HVMA03T100A-ST10S Gate Driver Transformer. This model is Automotive Grade and AEC-Q200 Compliant.

The Model HVMA03T100A-ST10S is designed with 10 mm creepage distance for a 1000 V working voltage that is ideal for new EV applications requiring high isolation voltage. Typical automotive applications include transistor gate drive power, battery management systems, and isolated power across separate voltage systems in hybrid vehicles. This transformer offers a wide operating temperature range from -40 °C to +155 °C for Class F operation. The high creepage, SMT package has a unique small footprint for a large working voltage.

The gate driver is designed for a switching frequency of 300 kHz to 400 kHz and provides output power up to 3 watts. The transformer can be used with gate driver controller ICs, with either fixed frequency or variable frequency. This model is RoHS compliant* and can be customized for other output voltages and applications. Please contact Bourns for additional technical support and IC compatibility.

Model	Output Power	Primary Inductance @100 kHz / 1V	Creepage Distance	Rated Working Voltage	Operating Temperature
HVMA03T100A-ST10S	3 watts	50 µH min.	10 mm	1000 V	-40 °C to +155 °C

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

- 3 watt gate driver transformer
- 300 kHz to 400 kHz switching frequency
- High working voltage of 1000 V
- SMT transformer with 10 mm creepage
- Basic insulation per IEC 61558-2 & IEC 60664-1
- Operating temperature: -40 °C to +155 °C
- AEC-Q200 compliant
- AUTOMOTIVE GRADE

Applications

- Transistor gate drive power
- Inverter circuits
- Battery management systems
- Motor drives
- Power delivery

Additional Information

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

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

IC25156

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