

NEW PRODUCT RELEASE

TRANSFORMERS



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

Model HVMA03F40C-ST10S

Riverside, California – *December 11, 2024* – Bourns Custom Magnetics Product Line is introducing the <u>Model HVMA03F40C-ST10S Flyback Transformer</u>. This new transformer is AEC-Q200 compliant, automotive grade and manufactured on a fully automated production line.

The Model HVMA03F40C-ST10S transformer is designed with a 10 mm creepage distance for a 900 V working voltage that is ideal for new EV applications that require high isolation voltage. Typical automotive applications include transistor gate drive power, powering battery management circuits, and isolated power across separate voltage systems in hybrid vehicles. The transformer has 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 high working voltage.

The Model HVMA03F40C-ST10S is designed for a switching frequency of 100 kHz to 400 kHz and will provide an output power of up to 3 watts. This transformer can be used with many flyback controller ICs with either fixed frequency or variable frequency, and can be customized for other output voltages and applications. Please contact Bourns for additional technical support and IC compatibility.

Model HVMA03F40C-ST10S Flyback Transformer Characteristics

Model	Output Power	Primary Inductance @ 100 kHz / 1 V	Creepage Distance	Rated Working Voltage	Operating Temperature
HVMA03F40C-ST10S	3 Watts	$40~\mu H \pm 15~\%$	10 mm min.	900 Volts	-40 °C to +155 °C

Please visit the Bourns website at www.bourns.com/products/magnetic-products/transformers-power for additional product details, and check out our Magnetic-products/transformers-power for application notes, white papers and brochures. Feel free to contact www.bourns.com/products/magnetic-products/transformers-power for application notes, white papers and brochures. Feel free to contact Bourns.com/products/transformers-power for application notes, white papers and brochures. Feel free to contact Bourns.com/products/transformers-power for application notes, white papers and brochures. Feel free to contact Bourns.com/products/transformers-power for application notes, white papers and brochures. Feel free to contact Bourns.com/products/transformers-power for application notes, white papers and the following the second notes of the

Features

- 3 Watt flyback transformer
- 100 to 400 kHz switching frequency
- 900 V working voltage up to 5000 m
- SMT transformer with 10 mm min. creepage
- Basic insulation per IEC 61558-2 & IEC 60664-1
- Operating temperature: -40 °C to +155 °C
- AEC-Q200 compliant
- AUTOMOTIVE (

Applications

- Transistor gate drive power
- Inverter circuits
- Battery Management Systems
- Motor drives
- Power Delivery

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

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