**Vishay Custom Magnetics** 

# **Custom Capabilities Power Transformers** All Switch Mode Power Topologies



# **PRODUCT TYPES**

• Switch mode power topologies: flyback, forward converter, push / pull, full bridge, half bridge, LLC resonant, isolated buck Capabilities:

www.vishay.com

- Frequencies to 10 MHz+
- Power levels to 10 kVA
- Gate-drive transformers
- Capabilities:
- Frequencies to 500 kHz
- MOSFET / IGBT voltages to 1200 V
- · Current sense transformers Capabilities:
  - Frequencies from 50 Hz / 60 Hz to > 10 kHz
  - Current to 5000 A
- · Linear single phase and three phase power transformers Capabilities:
  - Frequencies to 50 Hz / 60 Hz, 400 Hz
  - Power levels to 10 kVA

# **OVERALL CAPABILITIES**

- Operating temperature range from -55 °C to +220 °C
- Designed to meet UL, CSA, VDE, and IEC safety requirements
- Ruggedized packages for extreme environments
- AEC-Q200 gualified (automotive compliant)
- Space grade compliant to MIL-STD-981
- Multi-site manufacturing USA, Dominican Republic, Mexico, China

# **MATERIAL / PROCESS CAPABILITIES**

- · Conductor geometries: litz wire, foil, round magnet wire, rectangular magnet wire, square magnet wire, planar, stamped windings
- · Conductor materials: copper, aluminum
- Core materials: ferrite, powdered iron alloys, MPP, high flux, Kool Mu<sup>®</sup>, amorphous, tape wound, laminated
- Terminations: through-hole, SMD, press fit, flying lead
- · Potted and vacuum varnish impregnated
- Lead (Pb)-free capability

Test and instrumentation

<u>Alternative energy</u>

Automotive

Space

- Automated winding, soldering, assembly, and test capability
- SOLIDWORKS<sup>®</sup> and AutoCAD 3D design software

# INDUSTRIES SERVED

To view our custom magnetics application capabilities brochure, click below.

- Avionics
- Military
- Medical
- Industrial controls

#### **CONTACT INFORMATION**

For design assistance, please contact: custommags@vishay.com

To order products, please use the electronic order form: www.vishay.com/landingpage/custom-magnetics/transformerform.html

Revision: 08-Mar-16

1



Vishay

# Disclaimer

ALL PRODUCT, PRODUCT SPECIFICATIONS AND DATA ARE SUBJECT TO CHANGE WITHOUT NOTICE TO IMPROVE RELIABILITY, FUNCTION OR DESIGN OR OTHERWISE.

Vishay Intertechnology, Inc., its affiliates, agents, and employees, and all persons acting on its or their behalf (collectively, "Vishay"), disclaim any and all liability for any errors, inaccuracies or incompleteness contained in any datasheet or in any other disclosure relating to any product.

Vishay makes no warranty, representation or guarantee regarding the suitability of the products for any particular purpose or the continuing production of any product. To the maximum extent permitted by applicable law, Vishay disclaims (i) any and all liability arising out of the application or use of any product, (ii) any and all liability, including without limitation special, consequential or incidental damages, and (iii) any and all implied warranties, including warranties of fitness for particular purpose, non-infringement and merchantability.

Statements regarding the suitability of products for certain types of applications are based on Vishay's knowledge of typical requirements that are often placed on Vishay products in generic applications. Such statements are not binding statements about the suitability of products for a particular application. It is the customer's responsibility to validate that a particular product with the properties described in the product specification is suitable for use in a particular application. Parameters provided in datasheets and / or specifications may vary in different applications and performance may vary over time. All operating parameters, including typical parameters, must be validated for each customer application by the customer's technical experts. Product specifications do not expand or otherwise modify Vishay's terms and conditions of purchase, including but not limited to the warranty expressed therein.

Hyperlinks included in this datasheet may direct users to third-party websites. These links are provided as a convenience and for informational purposes only. Inclusion of these hyperlinks does not constitute an endorsement or an approval by Vishay of any of the products, services or opinions of the corporation, organization or individual associated with the third-party website. Vishay disclaims any and all liability and bears no responsibility for the accuracy, legality or content of the third-party website or for that of subsequent links.

Except as expressly indicated in writing, Vishay products are not designed for use in medical, life-saving, or life-sustaining applications or for any other application in which the failure of the Vishay product could result in personal injury or death. Customers using or selling Vishay products not expressly indicated for use in such applications do so at their own risk. Please contact authorized Vishay personnel to obtain written terms and conditions regarding products designed for such applications.

No license, express or implied, by estoppel or otherwise, to any intellectual property rights is granted by this document or by any conduct of Vishay. Product names and markings noted herein may be trademarks of their respective owners.

© 2024 VISHAY INTERTECHNOLOGY, INC. ALL RIGHTS RESERVED

Revision: 01-Jan-2024