

# **OPTOCOUPLER**

VOW3120

# Widebody High-Isolation and High-Creepage 2.5 A IGBT Driver





Vishay's new family of widebody high-isolation and high-creepage IGBT drivers offers industrial designers a robust, economical, and easy to implement isolation IGBT driver solution for both safety and electrical noise isolation. The VOW3120-X017T provides a high isolation distance, boasting an external creepage > 10 mm between high voltage power circuitry and susceptible low voltage circuits. Additionally, these parts exhibit extreme isolation voltage specifications, with V<sub>IOTM</sub> of 8000 V, and V<sub>IORM</sub> of 1414 V. In addition to safety isolation, meeting all major domestic and global electrical safety standards, the VOW3120 IGBT drivers also exhibit high noise isolation capability by their extremely high CMR of 50 kV/us typical.

### **KEY FEATURES**

- V<sub>IOTM</sub> of 8000 V
- V<sub>IORM</sub> of 1414 V
- Creepage and clearance > 10 mm
- Typical CMR > 50 kV/µs
- Very low supply current < 2.5 mA</li>

### **KEY BENEFITS**

- Complies with high industrial isolation distances
- Complies with high industrial working voltages
- Isolates industrial power circuits from sensitive controls
- Provides high performance isolation in a small SMD package
- Saves system cost against discrete solutions

#### **RESOURCES**

- Datasheet: VOW3120 www.vishay.com/doc?82442
- Technical questions contact: <a href="mailto:optocoupleranswers@vishay.com">optocoupleranswers@vishay.com</a>
- Sales contact: <u>www.vishay.com/doc?99914</u>
- Material categorization: For definitions of compliance please see <a href="www.vishay.com/doc?99912">www.vishay.com/doc?99912</a>



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PRODUCT SHEET 1/2 VMN-PT0398-1411



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### **KEY APPLICATIONS**



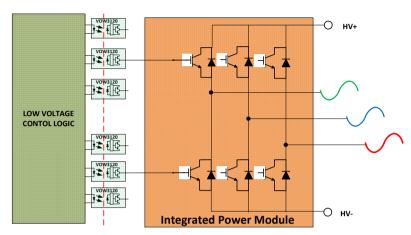
Industrial variable speed motor drives



Solar/wind inverters



Industrial welding



Typical IGBT Driver Application

### **KEY PERFORMANCE DATA**

RATINGS SPECIFIED ACROSS OPERATING TEMPERATURE	
External creepage distance	> 10 mm
Typical common mode noise rejection	50 kV/μs
V <sub>IOTM</sub>	8000 V
V <sub>IORM</sub>	1414 V
Maximum propagation delay	500 ns
Maximum output drive current	2.5 A

### **TYPICAL PERFORMANCE CURVES**

## High Isolation with High Switching Speed

