



Author: Bob Gee
Tel: 1 408 567-8388
E-mail: robert.gee@vishay.com

New Phototriacs with dV/dt of 5 $kV/\mu s$

The News:

Vishay Intertechnology, Inc. (NYSE: VSH) today announced a new family of 800-V phototriacs that feature a very low input trigger current of 1.6 mA and a static dV/dt greater than 5 $kV/\mu s$. Encased in a 6-pin DIP package, the new zero-crossing (ZC) and non-zero-crossing (NZC) phototriacs are designed for switching AC loads and driving larger SCRs or TRIACs in industrial applications.



Features:

- Industry's first devices to combine trigger current as low as 1.6 mA and dV/dt greater than 5 $kV/\mu s$, enabled by proprietary clamp circuit
 - Additional trigger current options are 2.0 mA and 3.0 mA
- Available in 700- and 800-V blocking voltages
- Reinforced insulation per IEC 60950 2.10.5.1
- Zero-crossing and non-zero-crossing function

The Key Applications:

- Switching AC loads and driving larger SCRs or TRIACs in industrial applications
- Industrial end products including solid state relays, AC motor drives, switching power supplies, programmable controllers, temperature controls, solenoid/valve controls, and lighting controls

The Perspective

Vishay's new VO4157 and VO4158 zero-crossing and VO4257 and VO4258 non-zero-crossing phototriacs in the 6-pin DIP package feature a low input trigger of 1.6 mA and static dV/dt greater than 5 $kV/\mu s$, both industry firsts, providing an alternative to Vishay's IL410 and IL420 with a dV/dt of 10 $kV/\mu s$.



The Key Benefits:

- Meets IEC1000-4-4 transient requirements
- Trigger current of 1.6 mA, 2.0 mA, or 3.0 mA, enabling direct interface with microcontroller output and digital logic
- dV/dt performance of 5 kV/ μ s complements Vishay's industry leading IL410 and IL420 with 10 kV/ μ s

Phototriacs with dV/dt of 5 kV/ μ s: Summary Table

Zero-Crossing Part Number	Non-Zero-Crossing Part Number	Blocking Voltage (V_{DRM})	Trigger Input (I_{tr})
VO4157D	VO4257D	700 V	1.6 mA
VO4157H	VO4257H	700 V	2.0 mA
VO4157M	VO4257M	700 V	3.0 mA
VO4158D	VO4258D	800 V	1.6 mA
VO4158H	VO4258H	800 V	2.0 mA
VO4158M	VO4258M	800 V	3.0 mA

Availability

Samples and production quantities of the new VO4157, VO4158, VO4257 and VO4258 phototriacs are available now with lead times of six to eight weeks for larger orders.

Contact Information

The Americas

Dale Henderson
+1 408 567-8317
dale.henderson@vishay.com

Europe

Andreas Mugele
+49 7131-67-2788
andreas.mugele@vishay.com

Asia/Pacific

Werner Kreile
+65 6780-7812
werner.kreile@vishay.com