

New VOT8024AM and VOT8121AM Optocouplers Offer 800 V Off-State Voltage, Deliver High Robustness and Noise Isolation

Product Benefits:

- Compact flat SOP-4 package
- High off-state voltage of 800 V
- dV/dt of 1000 V/ μ s
- Withstanding isolation voltage of 3750 V_{RMS}
- Low trigger currents down of 5 mA
- RoHS-compliant

Market Applications:

- Power TRIAC drivers in solid-state relays
- Three-phase air conditioners, boilers, and thermostats
- Industrial motor control and power line switching
- Motor, lamp, and valve control in household appliances



The News:

Vishay Intertechnology broadens its optoelectronics portfolio with the release of two new optocouplers with a phototriac output in the compact flat SOP-4 package. Featuring high off-state voltage of 800 V and dV/dt of 1000 V/ μ s, the Vishay Semiconductors VOT8024AM and VOT8121AM deliver high robustness and noise isolation for home appliances and industrial equipment.

- Isolate low voltage logic from 120 VAC, 240 VAC, and 380 VAC lines to control resistive, inductive, or capacitive loads, including motors, solenoids, high current thyristors, or TRIACs and relays
- Reducing design costs and saving board space, the devices consist of a GaAs infrared LED optically coupled to a:
 - Zero crossing TRIAC (VOT8024AM) for EMI reduction without the need for external snubber networks
 - Random-phase TRIAC (VOT8121AM) to enable phase-independent switching
- Low trigger currents facilitate an easy interface with digital logic
- High off-state voltage enhances safety margins in one-phase applications, while still maintaining enough voltage headroom for three-phase applications
- High withstanding isolation voltage provides additional safety

The Key Specifications:

- Peak off-state voltage: 800 V
- dV/dt : 1000 V/ μ s
- Package: flat SOP-4
- Isolation voltage: 3750 V_{RMS}
- Trigger current:
 - VOT8024AM: 5 mA
 - VOT8121AM: 10 mA