

Space-Saving, Industrial-Grade 1 Form A Solid-State Relays Combine Continuous Load Current to 5 A, Load Voltages to 60 V, Isolation Voltage of 3750 V_{RMS}, and Low Leakage Current of < 1 µA in Compact SOP-4 Package

Product Benefits:

- Offered in the compact, surface-mount SOP-4 package
- High continuous load current up to 5 A
- Load voltages up to 60 V
- Isolation voltage of 3750 V_{RMS}
- Low leakage current of < 1 µA typical
- Low typical turn-on and turn-off times for fast switching



Market Applications:

- Switching for industrial automation systems and controls; security systems; medical instrumentation; and broadcasting equipment

The News:

Vishay Intertechnology introduces two new industrial-grade 1 Form A solid-state relays in the surface-mount SOP-4 package. The Vishay Semiconductors VO1401AEFTR and VOR1003M4T combine high continuous load current of 550 mA and 5 A, respectively, with load voltages of 60 V and 30 V, isolation voltage of 3750 V_{RMS}, and low leakage current of < 1 µA typical.

- With their high current capability, the devices released today are ideal for replacing electromechanical relays – which are susceptible to damaging vibrations – with contactless optical relays that provide robust, vibration-proof switching for higher reliability and a longer service life
- The high isolation voltage of the VO1401AEFTR and VOR1003M4T allows them to be used in harsh environments
- The devices' compact package saves board space
- The relays' leakage current translates into higher efficiency by helping to keep the sensitive load on the output side turned off

The Key Specifications:

Part number	VO1401AEFTR	VOR1003M4
Package	SOP-4	
Continuous load current	550 mA	5 A
Isolation voltage	3750 V _{RMS}	
Load voltage	60 V	30 V
Leakage current (typical)	< 1 µA	
Turn-on time (typical)	1.3 ms	0.5 ms
Turn-off time (typical)	0.15 ms	0.1 ms



NEW PRODUCT INFORMATION

Product Group: Vishay Optoelectronics, Solid-State Relays / **April 2025**



Availability:

Samples and production quantities of the VO1401AEFTR and VOR1003M4T are available now, with lead times of four weeks.

To access the product datasheets on the Vishay Website, go to

<http://www.vishay.com/ppg?80533> (VO1401AEF)

<http://www.vishay.com/ppg?80532> (VOR1003M4)

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