



Product Group: Vishay Optoelectronics, Solid-State Relays / June 2016

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New VOR1142B4, VOR2142A8, and VOR2142B8 Hybrid Solid-State Relays Provide High-Reliability and Fast Switching Times

Product Benefits:

- Single- and dual-channel relays
- Offered in SMD-4, SMD-8, and DIP-8 packages
- High isolation test voltage of 5300 V_{RMS}
- Load voltages up to 400 V
- Low typical on-resistance of 22 Ω
- High load current of 140 mA
- Fast turn-on and turn-off of 0.13 ms / 0.05 ms typical
- Very low turn-on current of 0.25 mA typical
- Available in tape-and-reel and tube packing
- RoHS-compliant, halogen-free, and Vishay Green



Market Applications:

• Alarm switches; I/O cards; automation; battery management systems; and automatic test equipment in telecommunications, industrial, security system, and metering applications

The News:

Vishay Intertechnology expands its VOR family of hybrid solid-state relays with three new devices designed to deliver high reliability and noiseless switching for telecommunications, industrial, security system, and metering applications. As replacements for traditional electromechanical relays, the new Vishay Semiconductors 1 Form A VOR1142B4, VOR2142A8, and VOR2142B8 feature higher reliability and longer lifetimes, as well as fast switching times, current limit protection, and low power consumption.

- Normally open single-pole, single-throw (SPST) switches
- Modular hybrid construction allows high-performance MOSFETs for the switch output
- VDE-and UL-certified to meet reinforced insulation requirements for most applications
- Clean, bounce-free switching over an ambient temperature range of -40 °C to +100 °C





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The Key Specifications:

Part #	VOR1142B4	VOR2142A8	VOR2142B8
Single/dual channel	Single	Dual	Dual
Package	SMD-4	DIP-8	SMD-8
Isolation test voltage (V / 1 min)	5300	5300	5300
Typ. on-resistance (Ω)	22	22	22
Load current (mA)	140	140	140
Load voltage (V)	400	400	400
Typ. turn-on current (mA)	0.25	0.25	0.25

Availability:

Samples and production quantities of the new solid-state relays are available now, with lead times of four to six weeks for large orders.

To access the product datasheets on the Vishay website, go to http://www.vishay.com/ppg?84303 (VOR2142A8, VOR2142B8) http://www.vishay.com/ppg?84299 (VOR1142B4)

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