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IGBT And MOSFET Drivers In Stretched SO-6 Enable Compact Designs

From [Vishay Intertechnology](#), the Vishay Semiconductors VOFD341A and VOFD343A are IGBT and MOSFET drivers in the compact, high-isolation stretched SO-6 package. Delivering high peak output currents of 3 A and 4 A, respectively, these ICs offer high operating temperatures to +125°C and low propagation delay of 200 ns maximum (see the figure).

The high operating temperature of the VOFD341A and VOFD343A provides a higher temperature safety margin for more compact designs, while their high peak output current allows for faster switching by eliminating the need for an additional driver stage. The devices' low propagation delay minimizes switching losses while facilitating more precise PWM regulation.

The optocouplers' high isolation package enables high working voltages up to 1,140 V, which allows for high voltage inverter stages while still maintaining enough voltage safety margin. The RoHS-compliant devices offer high noise immunity of 50 kV/ μ s, which prevents fail functions in fast switching power stages.

Samples and production quantities of the VOFD341A and VOFD343A are available now, with lead times of six weeks. For more information, see the [VOFD341A](#) and [VOFD343A](#) pages.



Figure. Consisting of an AlGaAs LED optically coupled to an integrated circuit with a power output stage, the optocouplers are intended for solar inverters and microinverters, ac and brushless dc industrial motor control inverters, and inverter stages for ac-dc conversion in UPS. The devices are well suited for directly driving IGBTs with ratings up to 1200 V and 100 A.