



Dual-Channel High-Side Switches from Diodes Incorporated Provide Robust Protection for Automotive Applications

Plano, Texas – January 30, 2024 – Diodes Incorporated (Diodes) (Nasdaq: DIOD) has introduced its first automotive-compliant, dual-channel, high-side power switches—the [ZXMS82090S14PQ](#), [ZXMS82120S14PQ](#), and [ZXMS82180S14PQ](#)—as an expansion of its IntelliFET® self-protected MOSFET portfolio. These intelligent switches deliver high power within a compact footprint while also providing robust protection and diagnostic capabilities. The series is designed for driving 12V automotive loads, such as LEDs, bulbs, actuators, and motors in automotive body control and lighting systems.

The trio all feature a dual 41V-rated n-channel MOSFET array with onboard circuitry that protects against short circuits, manages inrush currents, and safeguards against overvoltage conditions including load dumps. In addition, the switches provide overtemperature protection with auto-restart, plus protection against electrostatic discharge damage. Loss of ground and reverse polarity protection can also be implemented with the aid of a few external components.

A dedicated current sense pin provides precise analog current monitoring of the outputs and fault indication for short-to-battery, short-to-ground, and open-load detection.

These IntelliFETs provide efficient, reliable, smaller footprint alternatives to relays, fuses, and discrete circuits. They are also form, fit, and functional equivalents for existing power switch devices, where customers need improved product supply.

The [ZXMS82090S14PQ](#), [ZXMS82120S14PQ](#), and [ZXMS82180S14PQ](#) are qualified to AEC-Q100, manufactured in IATF 16949 certified facilities, and support PPAP documentation. They are supplied in the thermally efficient SO-14EP package and are available at \$1.37 in 2,500 piece quantities.

About Diodes Incorporated

Diodes Incorporated (Nasdaq: DIOD), a Standard and Poor's SmallCap 600 and Russell 3000 Index company, delivers high-quality semiconductor products to the world's leading companies in the automotive, industrial, computing, consumer electronics, and communications markets. We leverage our expanded product portfolio of discrete, analog, and mixed-signal products and leading-edge packaging technology to meet customers' needs. Our broad range of application-specific solutions and solutions-focused sales, coupled with worldwide operations of 32 sites, including engineering, testing, manufacturing, and customer service, enables us to be a premier provider for high-volume, high-growth markets. For more information visit www.diodes.com.

IntelliFET is a registered trademark of Diodes Incorporated in the United Kingdom and other countries.

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Company Contact:

Gurmeet Dhaliwal
Director, Investor Relations & Corporate Marketing
Diodes Incorporated
+1 408-232-9003

[Contact Us](#)