



Vishay Intertechnology 80 V MOSFET in PowerPAK® 8x8SW Package Offers Best in Class RDS(ON) of 0.88 mΩ to Increase Efficiency

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Space-Saving Device Offers Low Max. R_{thJC} of 0.36 °C/W and Wettable Flanks to Improve Thermal Performance and Solderability in Industrial Applications

MALVERN, Pa., May 21, 2025 (GLOBE NEWSWIRE) -- To provide higher efficiency for industrial applications, Vishay Intertechnology, Inc. (NYSE: VSH) today introduced a new 80 V TrenchFET® Gen IV n-channel power MOSFET in the PowerPAK® 8x8SW bond wireless (BWL) package with best in class on-resistance. Compared to competing devices in the same footprint, the Vishay Siliconix [SiEH4800EW](#) offers 15 % lower on-resistance while reducing R_{thJC} by 18 %.

With on-resistance down to 0.88 mΩ typical at 10 V, the device released today minimizes power losses from conduction to increase efficiency while improving thermal performance with a low maximum R_{thJC} of 0.36 °C/W. With its 8 mm by 8 mm footprint, the space-saving device occupies 50 % less PCB space than MOSFETs in the TO-263 package while offering an ultra low profile of 1 mm.

The SiEH4800EW implements a fused lead to increase the source PAD solderable area to 3.35 mm², which is four times larger than a traditional PIN solder area. This decreases the current density between the MOSFET and PCB, reducing the risk of electro-migration risk and enabling a more robust design. In addition, the device's wettable flanks enhance solderability while making it easier to visually inspect the reliability of solder joints.

The MOSFET is ideal for synchronous rectification and OR-ing functionality. Typical applications will include motor drive controls, power tools, welding equipment, plasma cutting machines, battery management systems, robotics, and 3D printers. In these applications, the device offers high temperature operation to +175 °C, and its BWL design minimizes parasitic inductance while maximizing current capability.

RoHS-compliant and halogen-free, the MOSFET is 100 % Rg and UIS tested.

Comparison Table: D²PAK vs PowerPAK 8x8L vs PowerPAK 8x8SW

Part number		SUM60020E	SiJH5800E	SiEH4800EW
Package		TO-263	PowerPAK 8x8L	PowerPAK 8x8SW
Dimensions (mm)		16 x 10	8.0 x 8.0 *	8.0 x 8.0 *
Height (mm)		4.8	1.7	1.0 *
V _{DS} (V)		80	80	80
V _{GS} (V)		± 20	± 20	± 20
Configuration		Single	Single	Single
R _{DS(on)} (mΩ) @ 10 V _{GS}	V _{GSth} (V)	Min.	2.0	2.0
		Typ.	1.75	0.97
		Max.	2.1	1.35
I _D (A)		Max.	150	302
R _{thJC} (C/W)		Max.	0.4	0.45
Fused lead implement		No	No	Yes

Best in class (*)

Samples and production quantities of the SiEH4800EW are available now, with lead times of 13 weeks.

Vishay manufactures one of the world's largest portfolios of discrete semiconductors and passive electronic components that are essential to innovative designs in the automotive, industrial, computing, consumer, telecommunications, military, aerospace, and medical markets. Serving customers worldwide, Vishay is **The DNA of tech.**® Vishay Intertechnology, Inc. is a Fortune 1000 Company listed on the NYSE (VSH). More on Vishay at www.vishay.com.

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<https://www.flickr.com/photos/vishay/albums/72177720326159429>

Link to datasheet:

<http://www.vishay.com/ppg261532> (SiEH4800EW)

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