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New 600 V SiHJ8N60E and 650 V SiHJ6N65E and SiHJ7N65E E Series MOSFETs in PowerPAK® SO-8L Increase Reliability and Reduce Package Inductance

Product Benefits:

- Offered in space-saving, surface-mount PowerPAK SO-8L package designed and developed by Vishay Siliconix
- Compact 5 mm by 6 mm footprint
- Increase reliability compared to MOSFETs in leadless DFN packages
- Low on-resistance and gate charge reduce conduction and switching losses to save energy
- Withstand high energy pulses in the avalanche and commutation modes with guaranteed limits through 100 % UIS testing
- Fully RoHS compliant with Halogen free green mold compound



Market Applications:

- Power factor correction, flyback and two-switch forward converters, and hard-switched topologies for HID and LED lighting, and industrial, telecom, consumer, and computing power adaptors

The News:

Vishay Intertechnology announces that it has extended its offering of 600 V and 650 V E Series power MOSFETs with three new n-channel devices in the compact PowerPAK SO-8L package. Providing space-saving alternatives to MOSFETs in the TO-252 (DPAK) package, the Vishay Siliconix 600 V SiHJ8N60E and 650 V SiHJ6N65E and SiHJ7N65E increase reliability and provide reduced package inductance for lighting, industrial, telecom, computing, and consumer applications.

- PowerPAK SO-8L package is fully RoHS compliant and halogen free, and simplifies manufacturing with other surface-mount components, such as passives
- Occupy only half the board space, with half the height, of devices in the TO-252 (DPAK) package
- Reduced package inductance increases performance at higher operating frequencies
- Built on Vishay's latest energy-efficient E Series superjunction technology
- Low gate charge times on-resistance, a key figure of merit (FOM) for MOSFETs used in power conversion applications



The Key Specifications:

Part number	V _{DS} (V)	V _{GS} (V)	I _D (A) @ 25 °C	R _{DS(ON)} (Ω) @ 10 V (max.)	Q _g (nC) @ 10 V (typ.)
SiHJ8N60E	600	± 30	8.0	0.520	22
SiHJ6N65E	650	± 30	5.6	0.868	16
SiHJ7N65E	650	± 30	7.9	0.598	22

Availability:

Samples and production quantities of the SiHJ8N60E, SiHJ6N65E, and SiHJ7N65E MOSFETs are available now, with lead times of 16 weeks.

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

<http://www.vishay.com/ppg?91563> (SiHJ8N60E)

<http://www.vishay.com/ppg?91589> (SiHJ6N65E)

<http://www.vishay.com/ppg?91823> (SiHJ7N65E)

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