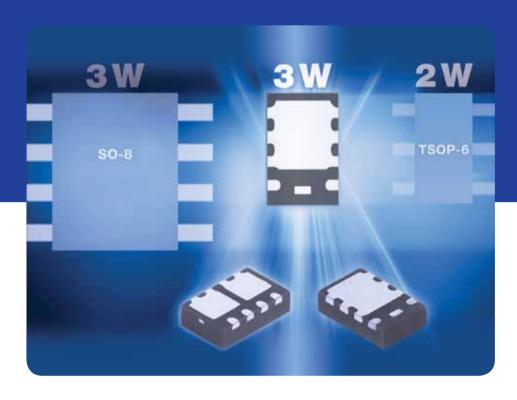


## **POWER MOSFETs**

PowerPAK® ChipFET®



# 3 W Maximum Power Dissipation in Compact 3 mm x 1.8 mm Footprint Area:

Replace TSOP-6 and SO-8 MOSFETs for Lower Thermal Resistance and Smaller Footprints

#### **KEY BENEFITS**

- Advanced thermal performance in a compact 3 mm by 1.8 mm footprint
- 3 W maximum power dissipation for high thermal efficiency
- Available in single, dual, co-packaged n- and p-channel, and MOSFET plus Schottky versions
- Breakdown voltage ratings from 20 V to 30 V for p-channel and 20 V to 60 V for n-channel

#### **APPLICATIONS**

#### **N-Channel**

- Point-of-load, synchronous rectification and logic-level DC/DC applications for low-power computer and fixed telecom systems
- Load switches in portable electronic systems and notebook PCs

#### P-Channel

· Load, charger, and battery switching in portable systems

#### P-Channel plus Schottky

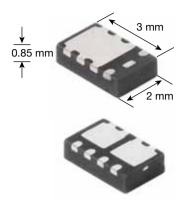
- Charger switch
- Asynchronous DC/DC in applications such as hard disk drives and game consoles



Vishay Siliconix

### **PowerPAK ChipFET**

	SO-8	PowerPAK ChipFET	TSOP-6
Max Length (mm)	5	3	3
Max Width (mm)	6	2	3
Max Footprint Area (mm <sup>2</sup> )	31	6	9
Maximum Height (mm)	1.75	0.85	1.1
Maximum Power Dissipation (W)	3	3	2



Part Number	V <sub>DS</sub> (V)	V <sub>GS</sub> (V)	R <sub>DS(ON)</sub> (Ω)			Qg (nC)				
			V <sub>GS</sub> = 10 V	V <sub>GS</sub> = 4.5 V	V <sub>GS</sub> = 2.5 V	V <sub>GS</sub> = 1.8 V	V <sub>GS</sub> = 10 V	V <sub>GS</sub> = 4.5 V	Samples	
Single N-Channel										
<u>Si5456DU</u>	20	20	0.01	0.0135			20	9.8	Available	
<u>Si5486DU</u>	20	8		0.015	0.017	0.021		21	Available	
<u>Si5418DU</u>	30	20	0.0145	0.0185			20	9.5	Available	
<u>Si5458DU</u>	30	20	0.041	0.051			6	2.8	Available	
<u>Si5410DU</u>	40	20	0.018	0.021			21	10	Available	
<u>Si5476DU</u>	60	20	0.034	0.041			21	10.5	Available	
Single P-Channel										
<u>Si5459DU</u>	- 20	12		0.052	0.082		17	8	Available	
<u>Si5419DU</u>	- 30	20	0.02	0.033			30	15.5	Available	
Dual N-Channel										
<u>Si5906DU</u>	30	20	0.031	0.04			5.7	2.9	Available	
<u>Si5944DU</u>	40	20	0.112	0.171			4.4	2.2	Available	
<u>Si5980DU</u>	100	20	0.567				2.2		Available	
Dual P-Channel										
Si5999EDU*	- 20	12		0.057	0.093			7	Available	
<u>Si5947DU</u>	- 20	12		0.058	0.1		11	5.5	Available	
N & P Pair										
<u>Si5517DU</u>	20	8		0.039	0.045	0.055		6	Available	
	- 20	8		0.072	0.100	0.131		5	Available	

<sup>\*</sup> Target specification

For the latest list of devices visit <a href="http://www.vishay.com/mosfets/powerpack-chipfet-package/">http://www.vishay.com/mosfets/powerpack-chipfet-package/</a>

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