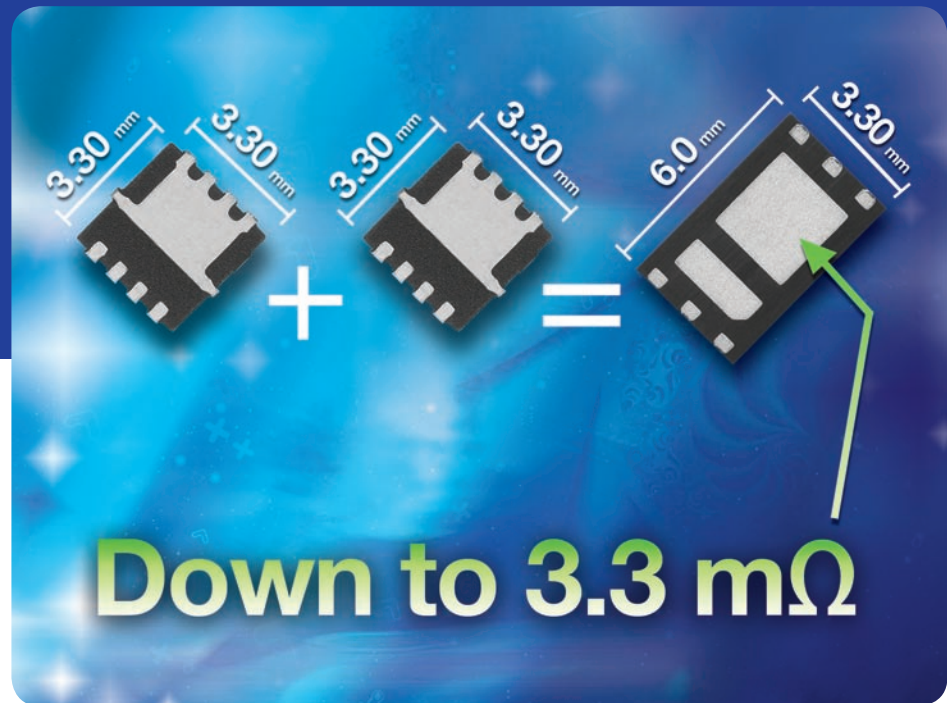




## POWER MOSFETs

PowerPAIR®



### Co-Packaged MOSFETs Reduce Space, Increase Performance Over Two Discretetes

#### KEY BENEFITS

- High- and low-side MOSFETs in one compact 6 mm x 3.7 mm package
- On-resistance down to 3.3 mΩ
- Maximum current up to 30 A
- Lowers solution space and cost compared to two discrete MOSFETs, saving clearance and labeling space
- Simplifies layout
- Reduces parasitic inductance from PCB traces, increasing efficiency and reducing ringing

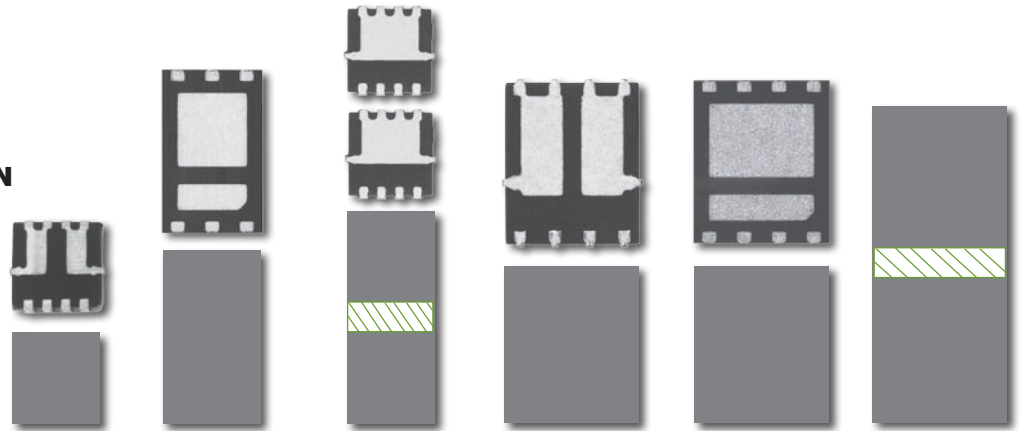
#### APPLICATIONS

- System power, POL, low-current DC/DC, and synchronous buck in notebooks
- VRMs
- Power modules
- Graphics cards
- Servers
- Gaming consoles



PowerPAIR®

PowerPAIR® COMPARISON



PowerPAIR® COMPARISON						
	PowerPAK® 1212-8 dual	PowerPAIR®	2 PowerPAK 1212-8 singles	PowerPAK SO-8 dual	PowerPAIR 6 x 5	2 PowerPAK SO-8 singles
Approximate size (mm <sup>2</sup> )	11	22	22 + spacing	30	30	60 + spacing
Approximate lowest max on-resistance (mΩ)	> 10	3.3	5	< 5	5	2
Approximate highest max current (A) T <sub>A</sub> = 25 °C	10	30	22	21	TBD	47
Approximate highest max current (A) T <sub>A</sub> = 70 °C	8	24	18	17	TBD	37
Reference	Si7232DN	SiZ710DT	SiS410DN	Si7236DP	SiZ900DT	SiR440DP, SiR866DP

PowerPAIR®										
Part Number	Ch	V <sub>DS</sub> (V)	V <sub>GS</sub> (V)	R <sub>DS(ON)</sub> (mΩ)		Q <sub>g</sub> (nC)		I <sub>D</sub> (A)		Samples
				V <sub>GS</sub> = 10 V	V <sub>GS</sub> = 4.5 V	V <sub>GS</sub> = 10 V	V <sub>GS</sub> = 4.5 V	T <sub>A</sub> = 25 °C	T <sub>A</sub> = 70 °C	
PowerPAIR 6 x 3.7										
SiZ710DT	1	20	20	6.8		11.5	6.9	16	15	Available
	2			3.3	4.3	38	18.2	30	24	
SiZ700DT	1	20	16	8.6	10.8	20	9.5	13.1	10.5	Available
	2			5.8	6.6	55	27	17.3	13.9	
PowerPAIR 6 x 5										
SiZ900DT*	1	30	20	9	11		12			Q4 10
	2			4.6	5.4		31			

\* Target Specification

For latest list of devices visit <http://www.vishay.com/mosfets/powerpair-6-37-package/>

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