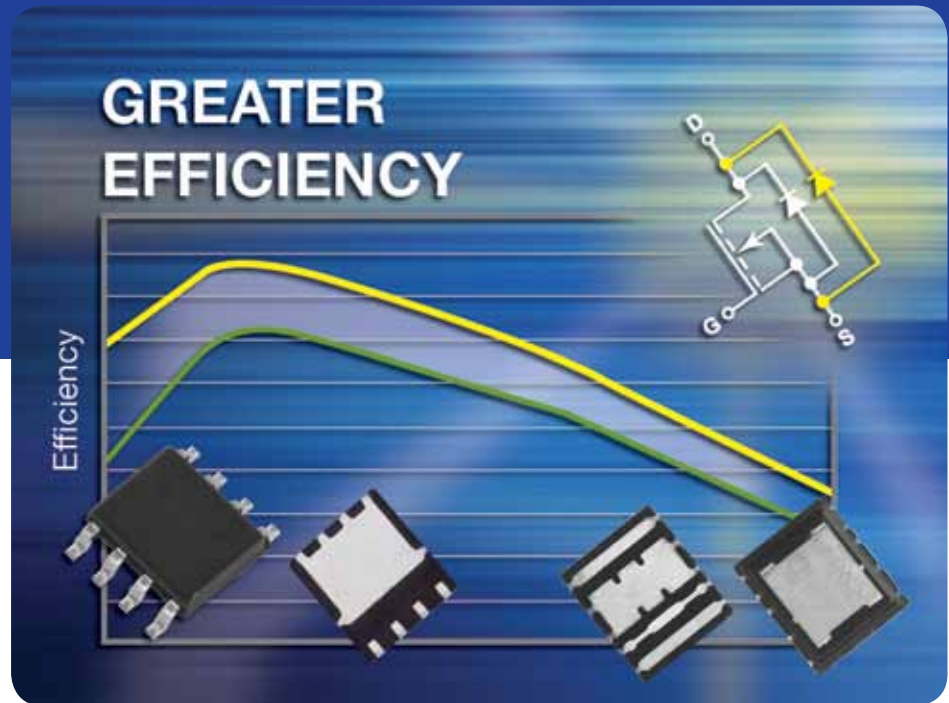




SkyFET®

Monolithic Power MOSFET and Schottky Diode



Integrated MOSFET and Schottky Diode Solution

KEY BENEFITS

- Increases efficiency for DC/DC converter applications
- Reduces space and solution cost by eliminating external Schottky diodes
- Ideal low-side switch for synchronous rectification
- Reduces power losses linked to the body diode of the MOSFET

APPLICATIONS

- Point of load (POL)
- Synchronous rectification
- VRM
- Synchronous buck low side for core voltages
- Graphics cards

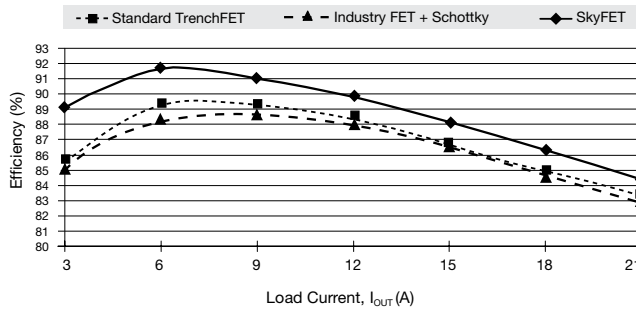
Datasheet is available on our web site at www.vishay.com
<http://www.vishay.com/mosfets>

SkyFET MOSFET and Schottky Diode

SkyFET® MOSFETs are ideal for increasing efficiency at light loads and at higher frequencies, thus reducing power losses in servers, notebooks, and VRMs. Their low V_F and Q_{rr} provide an advantage over standard trench MOSFETs that can be seen from the efficiency comparisons below at 300 kHz and 1 MHz.

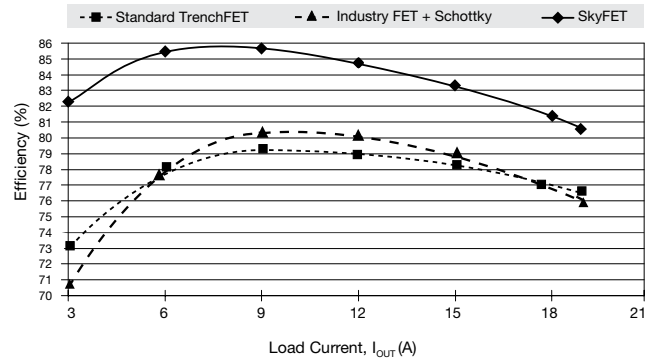
SkyFET Efficiency Performance, 300 kHz

$V_{IN} = 19\text{ V}$, $V_{OUT} = 1.3\text{ V}$



SkyFET Efficiency Performance, 1 MHz

$V_{IN} = 19\text{ V}$, $V_{OUT} = 1.3\text{ V}$



Part Number	V_{DS} (V)	V_{GS} (V)	$R_{DS(ON)}$ (Ω)		Q_g (nC)	Q_{rr} (nC)	Samples
			$V_{GS} = 10\text{ V}$	$V_{GS} = 4.5\text{ V}$	$V_{GS} = 4.5\text{ V}$		
Single MOSFET and Schottky Diode							
PowerPAK® SO-8							
Si7758DP	30	20	0.0029	0.0038	46	27	Available
Si7742DP	30	20	0.0035	0.0045	34	20.5	Available
Si7774DP	30	20	0.0038	0.0047	21.5	11	Available
Si7748DP	30	20	0.0048	0.0066	27.8	13	Available
Si7772DP	30	20	0.013	0.0165	8.3	7	Available
PolarPAK®							
SiE726DF	30	20	0.0024	0.0033	50	30	Available
SO-8							
Si4628DY	30	20	0.003	0.0038	27.5	21	Available
Si4752DY	30	20	0.0055	0.0076	13.8	12	Available
Si4638DY	30	20	0.0065	0.008	27.5	23	Available
Si4712DY	30	20	0.013	0.0165	8.3	7	Available
PowerPAK 1212-8							
SiS776DN	30	20	0.0062	0.0087	11.6	8	Available
Si7726DN	30	20	0.0095	0.0125	12.5	11	Available
Si7720DN	30	20	0.0125	0.015	13.7	5.5	Available
Dual MOSFETs and Schottky Diode							
SO-8							
Si4622DY	30	20	0.016	0.0186	19	15	Available
	30	16	0.0264	0.029	6	8	

For latest list of devices, visit <http://www.vishay.com/mosfets/skyfet/>

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