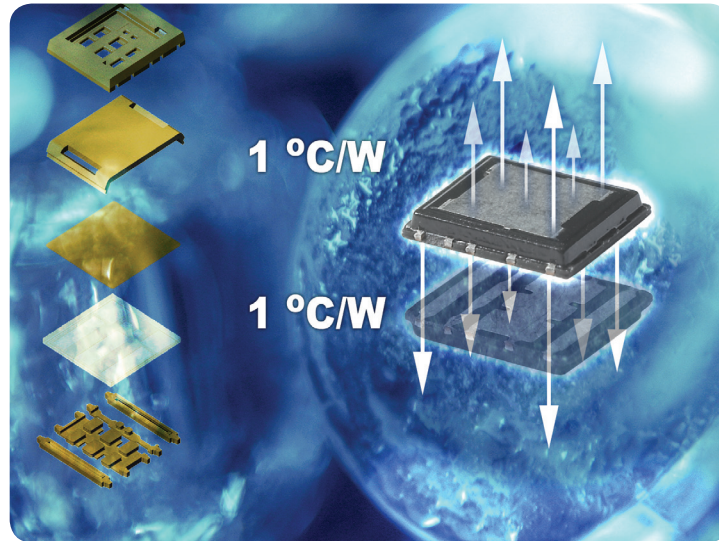


PolarPAK® Brings Standard Packaging to Double-Sided Cooling



FEATURES

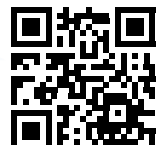
- Leadframe and plastic encapsulation construction
 - Provides better die protection and reliability
 - Easier manufacturing handling
 - Fixed footprint and pad layout independent of die size, ≤ 100 V
- Top (1 °C/W) and bottom (1 °C/W) cooling provides dual heat dissipation paths for forced air applications
- Easy to parallel devices, lowering inductance from board layouts
- Low parasitic inductance improves efficiency, especially at higher frequencies
- Double current density (> 60 A) reduces space and cost
- Same footprint area as SO-8
- 0.8 mm profile, less than half of SO-8

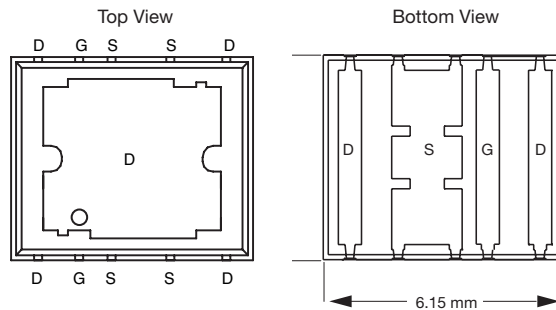
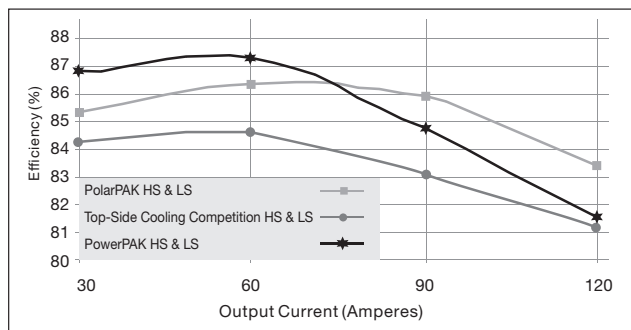
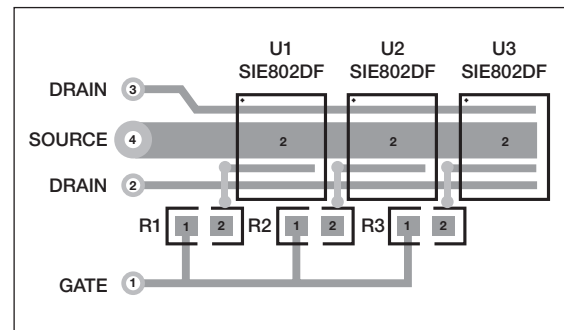
APPLICATIONS

- VRM modules for servers and workstations
- Fixed telecom and data communication systems

RESOURCES

- Datasheets: <http://www.vishay.com/mosfets/polarpak-package/>
- For technical questions contact: pmstechsupport@vishay.com
- More featured products: <http://www.vishay.com/landingpage/tradeshows/powermanagement/2011/mosfets.html>



PolarPAK®

Efficiency Comparison ($V_{IN} = 12\text{ V}$, $V_{OUT} = 1.3\text{ V}$)

PolarPAK Paralleling


PART NUMBER	V_{DS} (V)	V_{GS} (V)	$R_{DS(ON)}$ (Ω)			Q_g (nC)		SAMPLES
			$V_{GS}=10\text{V}$	$V_{GS}=4.5\text{V}$	$V_{GS}=2.5\text{V}$	$V_{GS}=10\text{V}$	$V_{GS}=4.5\text{V}$	
SINGLE								
SiE820DF	20	12		0.0035	0.0064	95	43	Available
SiE822DF	20	20	0.0034	0.0055		52	24	Available
SiE882DF	25	20	0.0014	0.0018		96	46	Available
SiE878DF	25	20	0.0052	0.0068		24	11.2	Available
SiE848DF	30	20	0.0016	0.0022		92	43	Available
SiE860DF	30	20	0.0021	0.0028		70	34	Available
SiE862DF	30	20	0.0032	0.0041		48	23	Available
SiE844DF	30	20	0.007	0.010		29	13.1	Available
SiE868DF	40	20	0.0023	0.0029		95	45	Available
SiE832DF	40	20	0.0055	0.007		51	25	Available
SiE876DF	60	20	0.0061			51		Available
SiE818DF	75	20	0.0095	0.0125		63	33	Available
SiE854DF	100	20	0.0142			50		Available
SiE804DF	150	20	0.038			70	46	Available
SiE836DF	200	30	0.13			27		Available
MOSFET AND SCHOTTKY DIODE								
SiE726DF	30	20	0.0024	0.0033		105	50	Available

* Target specifications

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