

**POWER MOSFETs**

SiHP185N50C, SiHG20N50C

**High-Voltage MOSFETs - 500 V N-Channel  
Combine Low On-Resistance, Low Gate Charge**

With the SiHP18N50C and SiHG20N50C, Vishay is extending its Gen 6.4 planar MOSFET technology to the TO-220 and TO-247 packages. Their low on-resistance, down to 270 mΩ maximum at  $V_{GS} = 10\text{ V}$ , helps save energy by reducing conduction losses.

**KEY BENEFITS**

- Combine 500 V ratings with low 0.270 Ω maximum on-resistance at a 10 V gate drive
  - Lowers conduction losses and saves energy
- Low gate charge of 65 nC and gate charge times on-resistance of 17.75 ΩnC
- Provide reliable operation
  - 100 % avalanche tested
  - High single-pulse (EAS) and repetitive (EAR) avalanche energy capabilities
- Peak current handling of 72 A pulsed and 18 A continuous
- High Voltage Power MOSFETs - 500 V with 0.270 Ω  $R_{DS(on)}$  at a 10 V  $V_{GS}$

**RESOURCES**

- Datasheet: SiHP18N50C - <http://www.vishay.com/doc?91374>  
SiHG20N50C - <http://www.vishay.com/doc?91382>
- More featured products:  
<http://www.vishay.com/ref/featuredmosfets/>
- For technical questions contact [hvm@vishay.com](mailto:hvm@vishay.com)
- Material categorization: For definitions of compliance please see <http://www.vishay.com/doc?99912>

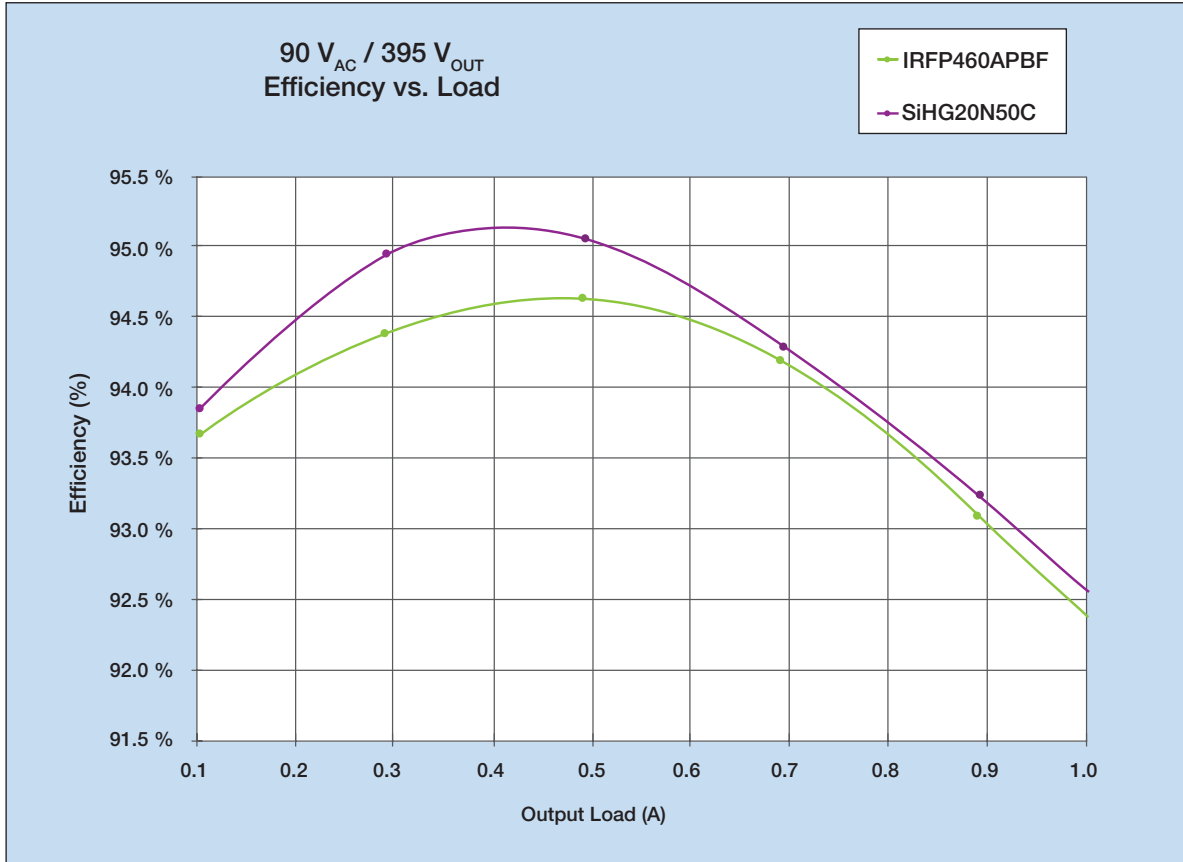


One of the World's Largest Manufacturers of  
**Discrete Semiconductors and Passive Components**

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**EFFICIENCY COMPARISON**

**APPLICATIONS**

Power factor correction (PFC) and pulsewidth modulation (PWM) applications in a wide range of electronic systems, including LCD TVs, PCs, servers, telecom systems, and welding machines

**KEY SPECIFICATIONS**

PART NUMBER	PACKAGE	V <sub>DS</sub> (V)	V <sub>GS</sub> (± V)	I <sub>DS</sub> (A)	Max R <sub>DS(on)</sub> (mΩ) at V <sub>GS</sub> = 10 V	Q <sub>g</sub> (nC)	C <sub>iss</sub> (pF)	C <sub>rss</sub> (pF)
				25 °C				
<a href="#">SiHP18N50C-E3</a>	TO-220	500	30	18	270	65	2451	26
<a href="#">SiHG20N50C-E3</a>	TO-247	500	30	20	270	65	2451	26