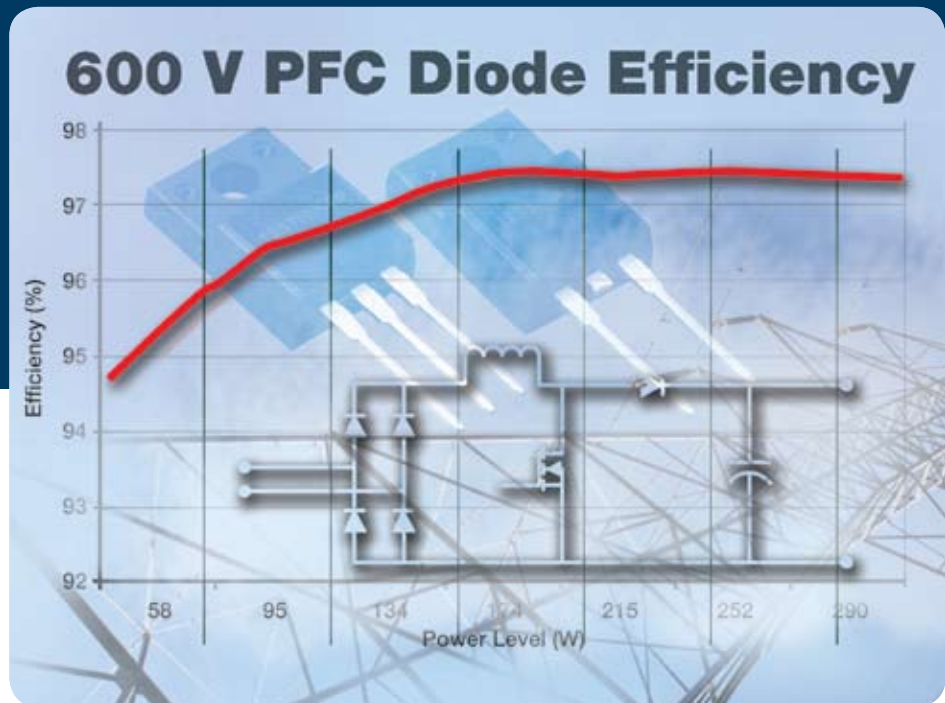




TIFIERS

Family Targets CCM PFC Stages for Power Supplies



LOWEST SWITCHING LOSSES FOR SI-BASED DEVICES

FEATURES

- 2 x 300-V silicon die for system efficiencies higher than 97 %
- Low forward voltage ratings: 1.7 V and 1.9 V at rated current
- Maximum operating junction temperature of +175 °C
- Very soft recovery characteristics, even at extremely high di/dt with minimum ringing
- Extremely low leakage currents: less than 1 μA @ 25 °C; less than 10 μA @ 125 °C
- Available in 2-pin or 3-pin TO-220 FullPak
- Cost-effective alternative to SiC diodes

BENEFITS

- Highest system efficiency compared to other hyperfast diodes
- Lowest switching losses
- Reduces ringing up to the highest di/dt to limit EMI
- Suitable for high-frequency applications

Datasheets available on our web site at the following URLs:

8STH06FP - <http://www.vishay.com/doc?94554>

8S2TH06FP - <http://www.vishay.com/doc?94553>

15STH06FP - <http://www.vishay.com/doc?94556>

15S2TH06FP - <http://www.vishay.com/doc?94555>

NEW FRED Pt™ 600-V HIGH-FREQUENCY RECTIFIERS

This new series of rectifiers completes Vishay's offering of products specifically developed for PFC applications, which includes the state-of-the-art "X" and "H" series for CCM PFC and the "L" series specifically developed for DCM PFC applications.

Device	$I_{F(AV)}$ (A)	@ TC (°C)	V_{FM} @ 125 °C (Typ) (V)	I_R @ 125 °C (Typ) (μA)	QRR @ 125 °C @ $I_F(AV)$ @ 200 A/μs @ 390 V (ns)	T_J Max (°C)	Package
8STH06FP	8	93	1.7 at 8 A	7	84	175	3-pin TO-220 FullPak
8S2TH06FP	8	93	1.7 at 8 A	7	84	175	2-pin TO-220 FullPak
15STH06FP	15	73	1.9 at 15 A	10	140	175	3-pin TO-220 FullPak
15S2TH06FP	15	73	1.9 at 15 A	10	140	175	2-pin TO-220 FullPak

Packages:

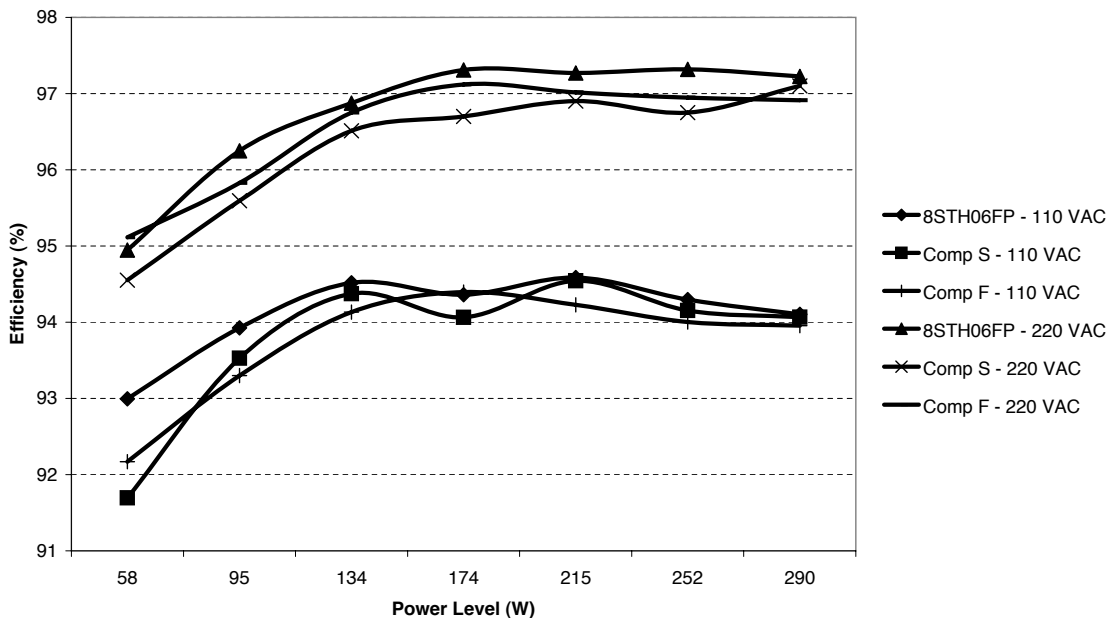
2-pin TO-220 FullPak



3-pin TO-220 FullPak



PFC Diodes Efficiency Comparison New 600V series vs Competition



NOTICE Specifications of the products displayed herein are subject to change without notice. Vishay Intertechnology, Inc., or anyone on its behalf, assumes no responsibility or liability for any errors or inaccuracies. Information contained herein is intended to provide a product description only. No license, express or implied, by estoppel or otherwise, to any intellectual property rights is granted by this document. Except as provided in Vishay's terms and conditions of sale for such products, Vishay assumes no liability whatsoever, and disclaims any express or implied warranty, relating to sale and/or use of Vishay products including liability or warranties relating to fitness for a particular purpose, merchantability, or infringement of any patent, copyright, or other intellectual property right. The products shown herein are not designed for use in medical, life-saving, or life-sustaining applications. Customers using or selling these products for use in such applications do so at their own risk and agree to fully indemnify Vishay for any damages resulting from such improper use or sale.

 For technical questions, contact Diodes-tech@vishay.com

 6121 Baker Rd.
 Suite 108
 Minnetonka, MN 55345

 Phone: 800-274-4284
 Fax: 952-933-6223
www.chtechnology.com