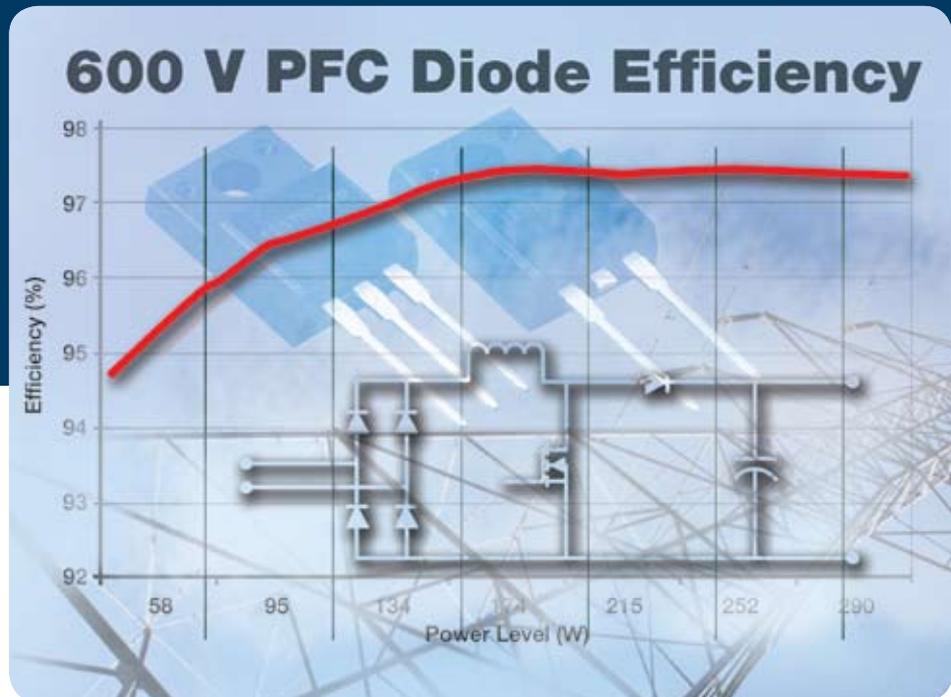




NEW FRED PT™ 600-V HIGH-FREQUENCY RECTIFIERS

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:

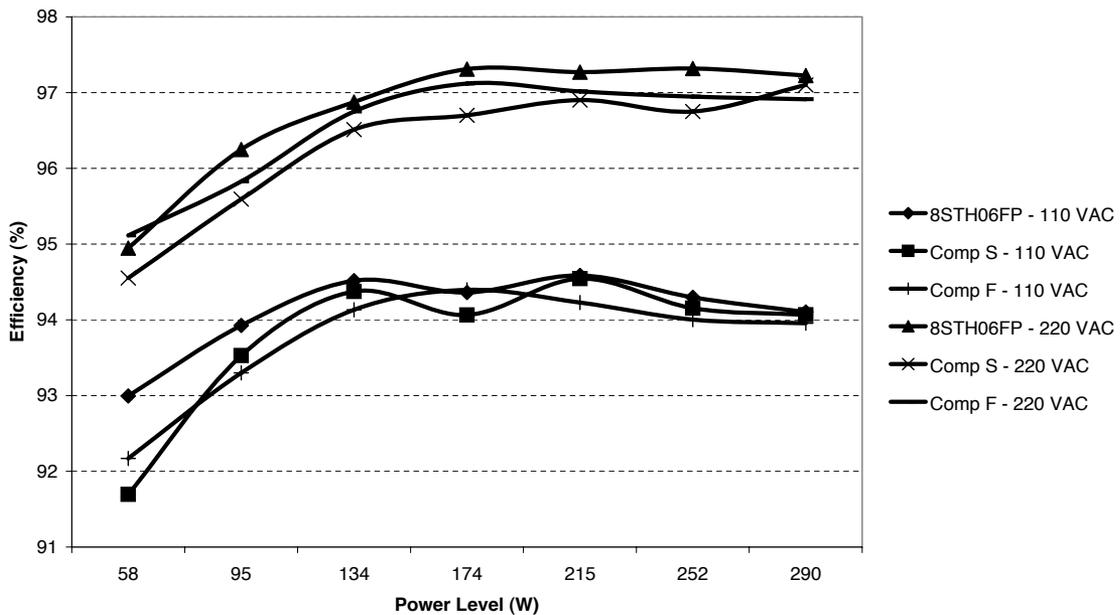
2-pin TO-220 FullPak



3-pin TO-220 FullPak



PFC Diodes Efficiency Comparison New 600V series vs Competition



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