

FRED Pt® Series 200 V to 600 V, T_J max. 175 °C: Flexible Ultrafast Platform for Power Supplies and Inverters



SMA



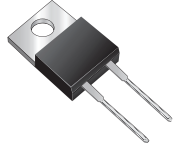
SMB



SMC



DPAK (TO-252)
(rated 4 A to 15 A)



TO-220AC/TO-220AB/Isolated TO-220AC
(rated 8 A to 30 A)



TO-220FPAC/AB
(rated 8 A to 30 A)



D²PAK (TO-263)
(rated 8 A to 30 A)



I²PAK (TO-262)
(rated 8 A to 30 A)



TO-247AC
(rated 30 A to 60 A)



PowerTab®
(rated 80 A to 150 A)

The Vishay Semiconductors FRED Pt® Gen1 and Gen2 series of ultrafast diodes offers designers a highly flexible solution that's equally at home in consumer and automotive applications.

With ratings from 200 V to 600 V and from 3 A to 150 A - unique in the industry - this series allows designers to increase the efficiency of power supplies with devices designed to minimize conduction and/or switching losses.

Their extreme low leakage current at high temperature, careful design of chip terminations, and construction with high-quality materials make FRED Pt the ideal choice for automotive applications as well.

FEATURES

- V_{RRM} 200 V to 600 V
- Same current (A) rating is available for devices optimized for lowest conduction losses or lowest switching losses.
 - Lowest Q_{rr} at 125 °C
 - Lowest V_F at I_F
- Improved efficiency in SMPS
- Soft recovery for reduced EMI at high di_F/dt
- T_J (max.) 175 °C
- AEC-Q101 qualified
- Material categorization: For definitions of compliance please see www.vishay.com/doc?99912

Note

* Lead (Pb)-containing terminations are not RoHS-compliant. Exemptions may apply.

APPLICATIONS

- Power factor correction (PFC) for switchmode power supplies in:
 - Desktop PCs
 - Lighting/ballast
 - Servers and telecom
 - PDP, TV's, LCD, monitors
 - Game controllers
- ECU for fuel injection on diesel/gasoline-fueled systems
- Traction control systems
- Solar inverters
- Freewheeling diode for industrial applications

