



The DNA of tech.®

FRED Pt® Gen 5 600 V Ultrafast Rectifiers in the TO-244 Package

240 A to 600 A Devices Offer Best in Class Conduction and Switching Losses to Increase Efficiency



ADVANTAGE

Deliver high speed, high temperature operation; offer lower conduction losses while maintaining low reverse recovery losses

KEY PRODUCT FEATURES

- ✓ Forward currents of 240 A, 300 A, 480 A, and 600 A (per module)
- ✓ Low Q_{rr} down to 260 nC typical
- ✓ Fast recovery time down to 52 ns
- ✓ High operating temperature range up to +175 °C
- ✓ Improved efficiency for industrial applications
- ✓ Common cathode configuration
- ✓ Low V_F down to 1.52 V typical at rated current



RESOURCES

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MARKETS AND APPLICATIONS



CONNECTIVITY

- Telecom mobile infrastructure



MOBILITY

- Transportation
- Agricultural equipment



ENERGY SECTOR

- Generation and exploration
- Distribution and management
- Storage



INDUSTRIAL

- Welding
- Drives and tools
- Infrastructure

DEVICE SPECIFICATION TABLE:

PART NUMBER	$I_{F(AV)}$ (A)	V_F typ. (1) (V)	t_{rr} typ. (1) (ns)
VS-VS5HD240CW60	240 at 95 °C	1.67	52
VS-VS5HD300CW60	300 at 81 °C	1.52	68
VS-VS5HD480CW60	480 at 92 °C	1.69	61
VS-VS5HD600CW60	600 at 77 °C	1.52	78

NOTE: (1) At datasheet conditions, $T_J = 25$ °C