



1200 V FRED Pt[®] Gen 7 Hyperfast Rectifiers

IN SMA (DO-214AC) AND SMF (DO-219AB) PACKAGES

Fast recovery time of 45 ns

Low Q_{rr} down to 105 nC typical

Improved reverse recovery energy (E_{rec})

Low junction capacitance down to 3.0 pF

Moisture sensitivity level of 1 in accordance with J-STD-020



Operating temperature range: -55 °C to +175 °C



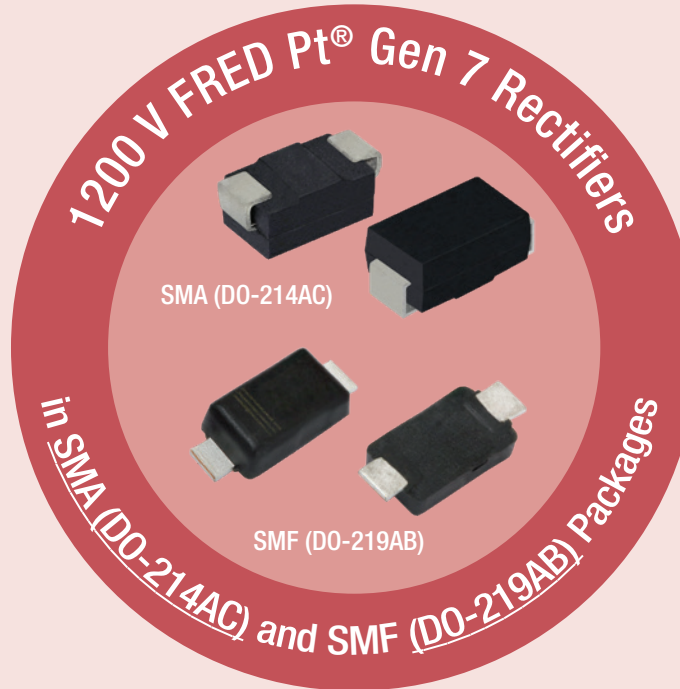
AEC-Q101 qualified and Vishay Automotive Grade



Forward current of 1 A and 2 A



Blocking voltage of 1200 V



APPLICATIONS

- Clamp, snubber, and freewheeling diodes in flyback auxiliary power supplies and high frequency rectifiers for bootstrap driver functionality
- Desaturation protection for the latest fast switching IGBTs and Si / SiC MOSFETs
- Industrial and telecom equipment, on-board chargers and motors for electric vehicles (EV), and Ćuk converters and industrial LED PFC CrM SEPIC circuitry



AUTOMOTIVE



INDUSTRIAL



EV BATTERY CHARGING



TELECOM INFRASTRUCTURE

Automotive and Non-Automotive Portfolio

Part Number	Reverse Voltage (V)	Package	V_F at I_F (V)	t_{rr} (ns)	T_J max. (°C)	Q_{rr} (nC)	Circuit Configuration	AEC-Q101 Qualified
VS-E7MH0112-M3	1200	SMA (DO-214AC)	1.1	75	175	150	Single	No
VS-E7MH0112HM3			1.1	75		150		Yes
VS-E7MX0112-M3			1.33	45		95		No
VS-E7MX0112HM3			1.33	45		95		Yes
VS-E7FX0112-M3		SMF (DO-219AB)	1.45	50		105		No
VS-E7FX0112HM3			1.45	50		105		Yes
VS-E7FX0212-M3			1.6	45		165		No
VS-E7FX0212HM3			1.6	45		165		Yes

For technical questions: DiodesAmericas@vishay.com, DiodesEurope@vishay.com, or DiodesAsia@vishay.com