



## DIODES

### FRED Pt<sup>®</sup> Rectifiers in SlimDPAK

#### FRED Pt<sup>®</sup> Rectifiers in SlimDPAK (TO-252AE) Package Increase Power Density and Improve Thermal Performance



#### KEY BENEFITS

- Reverse voltages of 200 V and 600 V
- Low profile (1.3 mm) SlimDPAK (TO-252AE) package
- Low forward voltage drop (down to 0.71 V at 4 A) reduces power losses and improves efficiency
- Footprint-compatible with the DPAK package with 43 % lower profile enabling slimmer end products while the heatsink area is 14 % larger for lower thermal resistance
- High forward current ratings to 10 A for 200 V rectifiers and 15 A for 600 V rectifiers
- Ultrafast recovery times down to 14 ns
- Operating temperature range of -55 °C to +175 °C
- Automotive Grade and commercial / industrial versions available
- RoHS-compliant and halogen-free

#### APPLICATIONS

- DC/DC converters:
  - AEC-Q101 rectifiers: engine control units (ECU), anti-lock braking systems (ABS), and HID and LED lighting
  - Commercial / industrial rectifiers: telecom power supplies

#### RESOURCES

- Datasheets: please see next page for the list of products
- For technical questions, contact: [DiodesAmericas@vishay.com](mailto:DiodesAmericas@vishay.com), [DiodesEurope@vishay.com](mailto:DiodesEurope@vishay.com), [DiodesAsia@vishay.com](mailto:DiodesAsia@vishay.com)
- Material categorization: for definitions of compliance, please see [www.vishay.com/doc?99912](http://www.vishay.com/doc?99912)





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## FRED Pt® Rectifiers in SlimDPAK

Vishay Intertechnology introduces 13 new 200 V and 600 V FRED Pt® ultrafast recovery rectifiers in the eSMP® Series SlimDPAK (TO-252AE) package, each available in Automotive Grade and commercial / industrial versions. Offering lower profiles and better thermal performance than devices in the DPAK (TO-252AA) package, the Vishay Semiconductors rectifiers deliver high power density and efficiency for automotive and telecom applications. The devices' low forward voltage drops reduce power losses and improve efficiency.

VISHAY P/N	I <sub>F(AV)</sub> (A)	V <sub>BR</sub> (V)	V <sub>F</sub> (V)	at I <sub>F</sub> (A)	T <sub>rr</sub> (ns)	I <sub>FSM</sub> (A)	T <sub>J</sub> MAX. (°C)	AEC-Q101 AVAILABLE
<a href="#">VS-4EVH02HM3</a>	4	200	0.71	4	16	100	175	Yes
<a href="#">VS-4EVH02-M3</a>	4	200	0.71	4	16	100	175	No
<a href="#">VS-6CVH02HM3</a>	2 x 3	200	0.75	3	20	140	175	Yes
<a href="#">VS-6CVH02-M3</a>	2 x 3	200	0.75	3	16	100	175	No
<a href="#">VS-8CVH02HM3</a>	2 x 4	200	0.71	4	16	200	175	Yes
<a href="#">VS-8CVH02-M3</a>	2 x 4	200	0.71	4	16	200	175	No
<a href="#">VS-10CVH02HM3</a>	2 x 5	200	0.74	5	16	200	175	Yes
<a href="#">VS-10CVH02-M3</a>	2 x 5	200	0.74	5	16	200	175	No
<a href="#">VS-6EVL06HM3</a>	6	600	0.98	6	34	80	175	Yes
<a href="#">VS-6EVL06-M3</a>	6	600	0.98	6	34	80	175	No
<a href="#">VS-6EVH06HM3</a>	6	600	1.26	6	16	70	175	Yes
<a href="#">VS-6EVH06-M3</a>	6	600	1.26	6	16	70	175	No
<a href="#">VS-6EVX06HM3</a>	6	600	1.65	6	14	50	175	Yes
<a href="#">VS-6EVX06-M3</a>	6	600	1.65	6	14	50	175	No
<a href="#">VS-8EVL06HM3</a>	8	600	0.98	8	34	130	175	Yes
<a href="#">VS-8EVL06-M3</a>	8	600	0.98	8	34	130	175	No
<a href="#">VS-8EVH06HM3</a>	8	600	1.30	8	16	90	175	Yes
<a href="#">VS-8EVH06-M3</a>	8	600	1.30	8	16	90	175	No
<a href="#">VS-8EVX06HM3</a>	8	600	1.40	8	14	80	175	Yes
<a href="#">VS-8EVX06-M3</a>	8	600	1.40	8	14	80	175	No
<a href="#">VS-15EVL06HM3</a>	15	600	0.98	15	38	180	175	Yes
<a href="#">VS-15EVL06-M3</a>	15	600	0.98	15	38	180	175	No
<a href="#">VS-15EVU06HM3</a>	15	600	1.10	15	26	160	175	Yes
<a href="#">VS-15EVU06-M3</a>	15	600	1.10	15	26	160	175	No
<a href="#">VS-15EVH06HM3</a>	15	600	1.20	15	20	120	175	Yes
<a href="#">VS-15EVH06-M3</a>	15	600	1.20	15	20	120	175	No