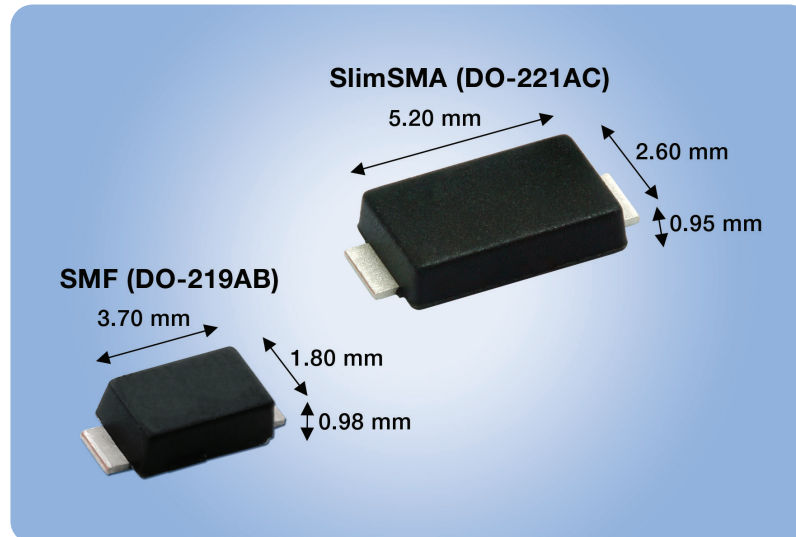




## DIODES

# FRED Pt<sup>®</sup> Rectifiers in SlimSMA and SMF Packages

## 1 A, 2 A, and 3 A FRED Pt<sup>®</sup> Ultrafast Rectifiers for Automotive and Telecom Applications



### KEY BENEFITS

- 1 A devices reduce switching losses
  - Compact SMF (DO-219AB) package with low < 1 mm profile
- 2 A and 3 A devices provide increased power density
  - Compact SlimSMA (DO-221AC) package with low < 1 mm profile
- AEC-Q101 qualified
- Operating junction temperature of +175 °C
- Devices' packages save significant PCB space compared to standard SMA, SMB, and SMC packages, while increasing power density to lower overall costs

### APPLICATIONS

- DC/DC converters in automotive engine control units (ECU), ABS, and LED lighting, in addition to telecom DC/DC bricks

### RESOURCES

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

RoHS  
COMPLIANT

HALOGEN  
FREE

A WORLD OF  
SOLUTIONS™



# DIODES

## FRED Pt<sup>®</sup> Rectifiers in SlimSMA and SMF Packages

With their fast and soft recovery characteristics, low leakage current, and low forward voltage drop, the 1 A, 2 A, and 3 A FRED Pt<sup>®</sup> ultrafast recovery rectifiers reduce switching losses and over-dissipation in automotive and telecom applications. With compact footprints and low profiles of < 1 mm, the devices' SlimSMA and SMF packages save significant PCB space compared to standard SMA, SMB, and SMC packages, while increasing power density to lower overall costs. The rectifiers feature a planar structure and platinum doped lifetime control to guarantee high overall performance, ruggedness, and reliability characteristics, while their operating junction temperature to +175 °C provides a more robust design.

$I_{F(AV)}$ (A)	PART NUMBER	PACKAGE	$V_F$ (V)	$V_R$ (V)	$t_{rr}$ (ns)	AEC-Q101 QUALIFIED
1	<a href="#">VS-1EFH01-M3</a>	SMF (DO-219AB)	0.74	100	25	No
	<a href="#">VS-1EFH01HM3</a>		0.74	100	25	Yes
	<a href="#">VS-1EFH02-M3</a>		0.74	200	25	No
	<a href="#">VS-1EFH02HM3</a>		0.74	200	25	Yes
	<a href="#">VS-1EFU06-M3</a>		0.83	600	55	No
	<a href="#">VS-1EFU06HM3</a>		0.83	600	55	Yes
2	<a href="#">VS-2EFH01-M3</a>		0.75	100	25	No
	<a href="#">VS-2EFH01HM3</a>		0.75	100	25	Yes
	<a href="#">VS-2EFH02-M3</a>		0.75	200	25	No
	<a href="#">VS-2EFH02HM3</a>		0.75	200	25	Yes
	<a href="#">VS-2EFU06-M3</a>		0.95	600	25	No
	<a href="#">VS-2EFU06HM3</a>		0.95	600	25	Yes
	<a href="#">VS-2EJH01-M3</a>	SlimSMA (DO-221AC)	0.72	100	25	No
	<a href="#">VS-2EJH01HM3</a>		0.72	100	25	Yes
<a href="#">VS-2EJH02-M3</a>	0.72		200	55	No	
<a href="#">VS-2EJH02HM3</a>	0.72		200	55	Yes	
3	<a href="#">VS-3EJH01-M3</a>	0.74	100	30	No	
	<a href="#">VS-3EJH01HM3</a>	0.74	100	30	Yes	
	<a href="#">VS-3EJH02-M3</a>	0.74	200	30	No	
	<a href="#">VS-3EJH02HM3</a>	0.74	200	30	Yes	
	<a href="#">VS-3EJU06-M3</a>	0.99	600	50	No	
	<a href="#">VS-3EJU06HM3</a>	0.99	600	50	Yes	