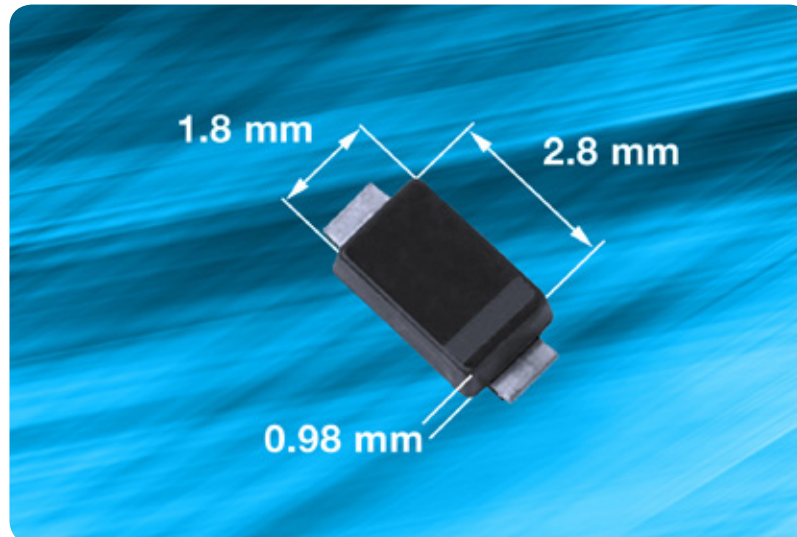




## DIODES

### VTVSxxSMF Series

## TVS Protection Diodes – First to Feature 2 % Breakdown Voltage Tolerance; Provide High Surge Capability of 400 W at 10/1000 $\mu$ s



### KEY BENEFITS

- Breakdown voltage tolerance down to 2 %
- SMF package with low profile of 1 mm
- High surge capability of 400 W at 10/1000  $\mu$ s
- Peak pulse current from 2.9 A to 20.3 A
- AEC-Q101-qualified
- RoHS-compliant and halogen-free
- Vishay Automotive Grade

### APPLICATIONS

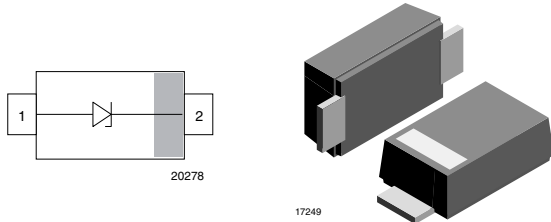
- Line transient voltage protection in space-constrained electronics (such as laptops, notebooks, tablets, smartphones, and external hard drives)

### RESOURCES

- Datasheet: please visit [www.vishay.com/ppg?85891](http://www.vishay.com/ppg?85891)
- For technical questions, contact [DiodesAmericas@vishay.com](mailto:DiodesAmericas@vishay.com), [DiodesEurope@vishay.com](mailto:DiodesEurope@vishay.com), or [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)

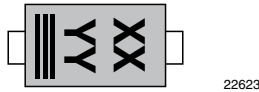


## 400 W Transient Voltage Suppressor (TVS) Diode in SMF Package



PRIMARY CHARACTERISTICS	
$V_{BR}$	6.4 V to 78.2 V
$V_{WM}$	5.0 V to 63 V
$P_{PPM}$	400 W
$T_J$ max.	175 °C
Polarity	Uni-directional
Package	DO-219AB (SMF)

**MARKING** (example only)



Bar = cathode marking  
 YY = type code (see table below)  
 XX = date code

**FEATURES**

- 400 W peak pulse power capability with a 10/1000  $\mu$ s waveform
- Tolerance of the avalanche breakdown voltage  $\pm 5\%$  VTVSxxxA...  $\pm 2\%$  VTVSxxxG...
- Low-profile package
- Wave and reflow solderable
- ESD-protection acc. IEC 61000-4-2  $\pm 30$  kV contact discharge  $\pm 30$  kV air discharge
- Excellent clamping capability
- “Low-Noise” technology - very fast response time
- AEC-Q101 qualified
- Material categorization: for definitions of compliance please see [www.vishay.com/doc?99912](http://www.vishay.com/doc?99912)



**RoHS**  
 COMPLIANT  
 HALOGEN  
**FREE**

ORDERING INFORMATION							
PART NUMBER (EXAMPLE)	TOLERANCE $V_{BR}$	ENVIRONMENTAL AND QUALITY CODE			PACKAGING CODE		ORDERING CODE (EXAMPLE)
		AEC-Q101 QUALIFIED	RoHS-COMPLIANT + LEAD (Pb)-FREE TERMINATIONS HALOGEN-FREE	TIN PLATED	3K PER 7" REEL (8 mm TAPE), 30K/BOX = MOQ	10K PER 13" REEL (8 mm TAPE), 50K/BOX = MOQ	
VTVS5V0ASMF-	$\pm 5\%$		M	3	-08		VTVS5V0ASMF-M3-08
VTVS5V0ASMF-	$\pm 5\%$	H	M	3	-08		VTVS5V0ASMF-HM3-08
VTVS5V0ASMF-	$\pm 5\%$		M	3		-18	VTVS5V0ASMF-M3-18
VTVS5V0ASMF-	$\pm 5\%$	H	M	3		-18	VTVS5V0ASMF-HM3-18
VTVS5V0GSMF-	$\pm 2\%$		M	3	-08		VTVS5V0GSMF-M3-08
VTVS5V0GSMF-	$\pm 2\%$	H	M	3	-08		VTVS5V0GSMF-HM3-08
VTVS5V0GSMF-	$\pm 2\%$		M	3		-18	VTVS5V0GSMF-M3-18
VTVS5V0GSMF-	$\pm 2\%$	H	M	3		-18	VTVS5V0GSMF-HM3-18

Revision 15-Dec-15