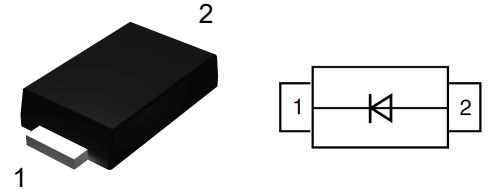


## Schottky Barrier Rectifier in SMAF

### Features

- Schottky barrier diodes
- Low forward voltage drop
- High Junction Temperature



### Mechanical Data

- **Case:** SMAF (plastic package).  
Lead free; RoHS compliant
- **Molding Compound Flammability Rating:**  
UL 94 V-0
- **Terminals:** High temperature soldering guaranteed:  
260 °C/10 sec. at terminals

### Applications

For use in low voltage, high frequency inverters, free wheeling, and polarity protection application

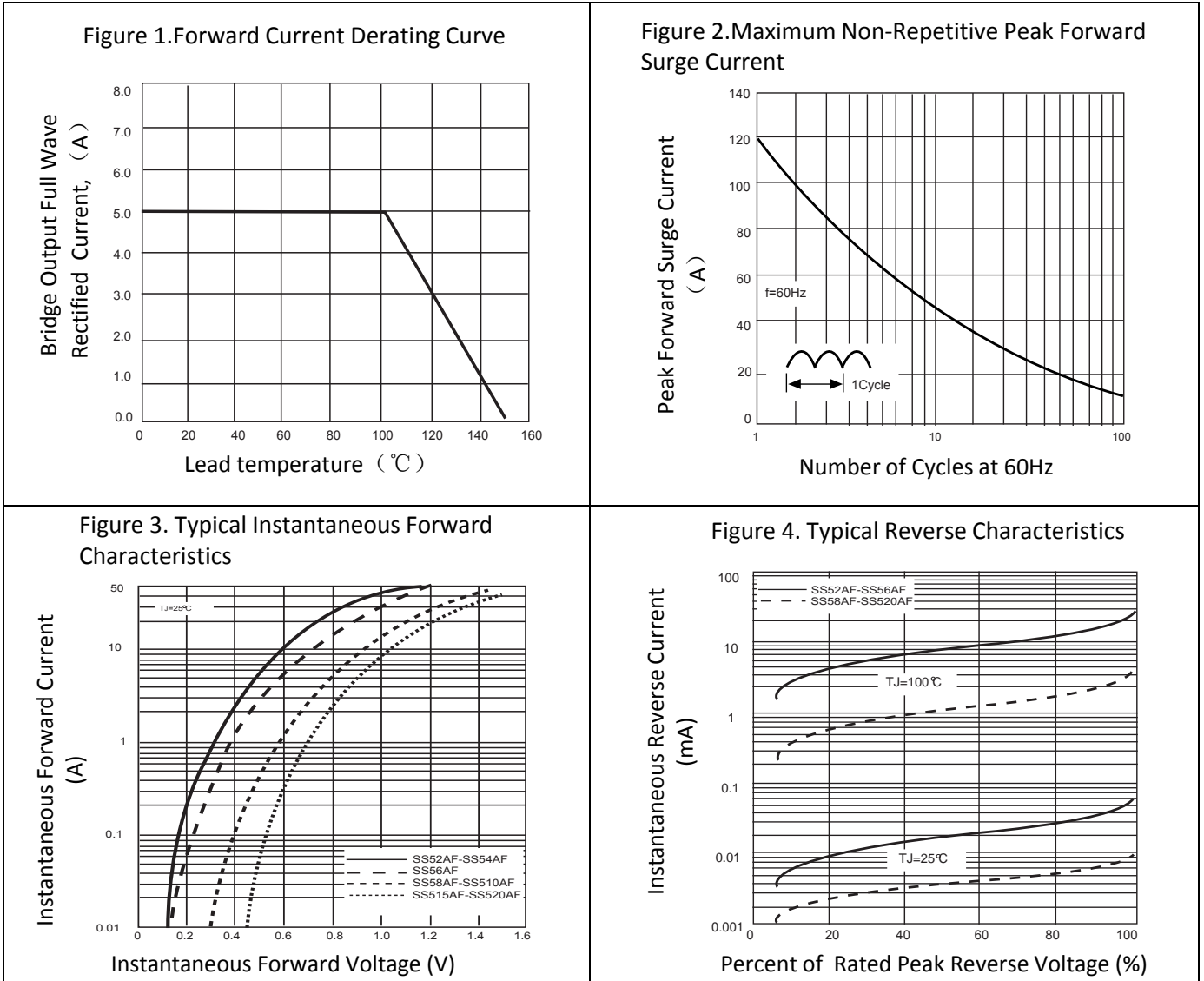
### Absolute Maximum Ratings

Ratings at 25 °C, ambient temperature unless otherwise specified

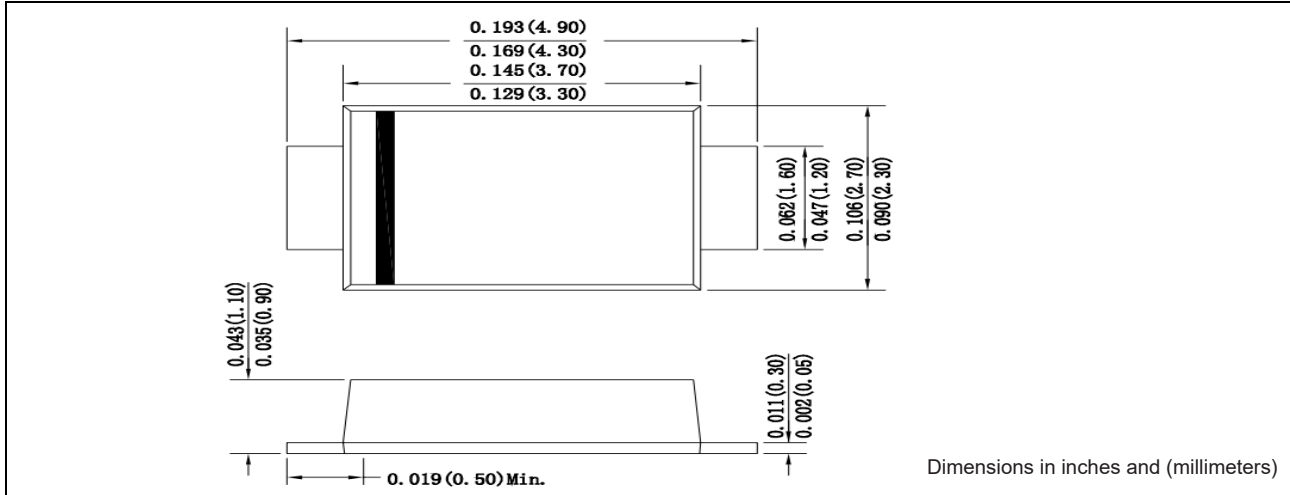
Parameter	SYMBOLS	SS52AF	SS54AF	SS56AF	SS58AF	SS510AF	SS515AF	SS520AF	UNITS
Maximum repetitive peak reverse voltage	V <sub>RRM</sub>	20	40	60	80	100	150	200	V
Maximum RMS voltage	V <sub>RMS</sub>	14	28	42	56	70	105	140	V
Maximum DC blocking voltage	V <sub>DC</sub>	20	40	60	80	100	150	200	V
Maximum average forward rectified current at T <sub>L</sub> =100 °C	I <sub>(AV)</sub>	5.0							A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	I <sub>FSM</sub>	120.0							A
Maximum instantaneous forward voltage at 5.0A	V <sub>F</sub>	0.55	0.70	0.85		0.95		V	
Maximum DC reverse current at rated DC blocking voltage T <sub>A</sub> =25 °C T <sub>A</sub> =125 °C	I <sub>R</sub>	0.5 50		0.05 10		mA			
Typical thermal resistance	R <sub>qJA</sub>	80.0							°C/W
Operating junction temperature range	T <sub>J</sub>	-55 to +150							°C
Storage temperature range	T <sub>STG</sub>	-55 to +150							°C

Note1: Thermal resistance from junction to lead, mounted on PCB with 5.0×5.0mm copper pads

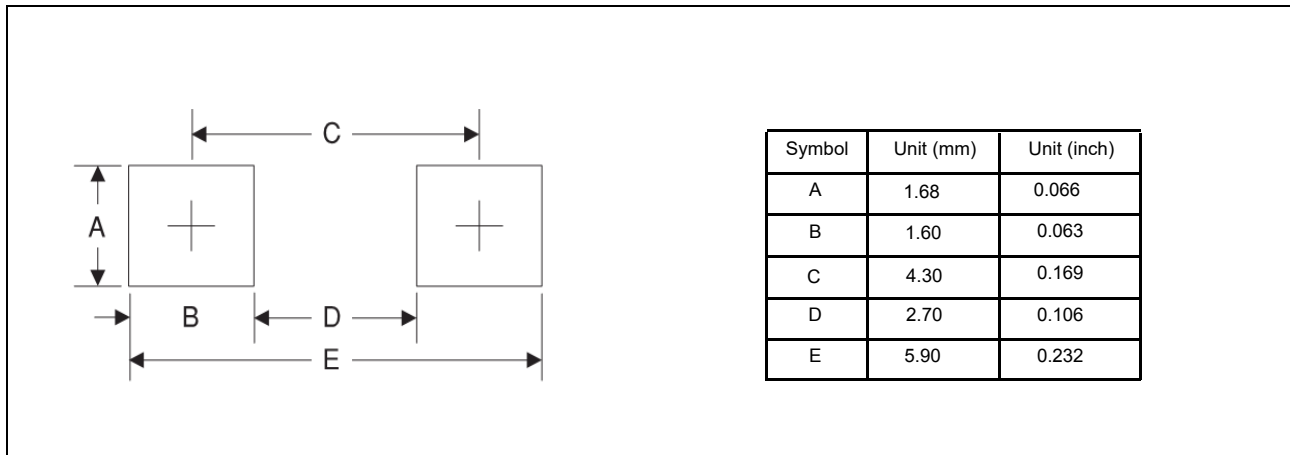
**Typical Characteristics** ( $T_{amb} = 25\text{ }^{\circ}\text{C}$  unless otherwise specified)



### Package Dimensions



### PAD Dimensions



### Ordering information

Order code	Package	Packaging option	Base quantity	Packaging specification
SS52AF Thru SS520AF	SMAF	Tape and reel	3000pcs / reel	EIA STD RS-481

### Revision history

Date	Revision	Changes
23-May-2020	1.0	Initial release

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