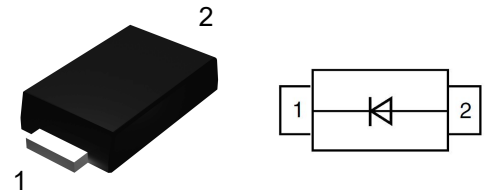


Schottky Barrier Rectifier in SMAF

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

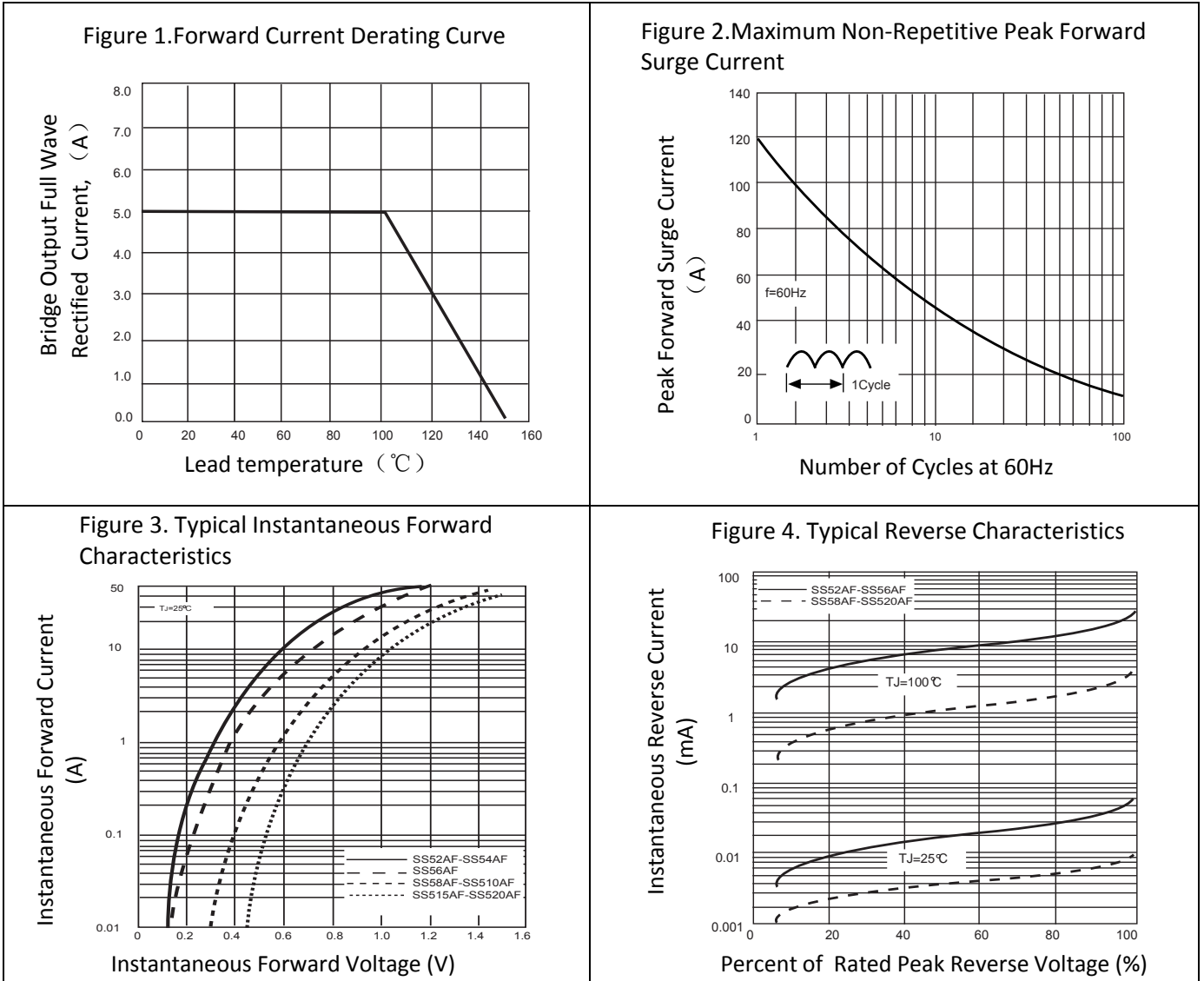
Absolute Maximum Ratings

Ratings at 25 °C, ambient temperature unless otherwise specified

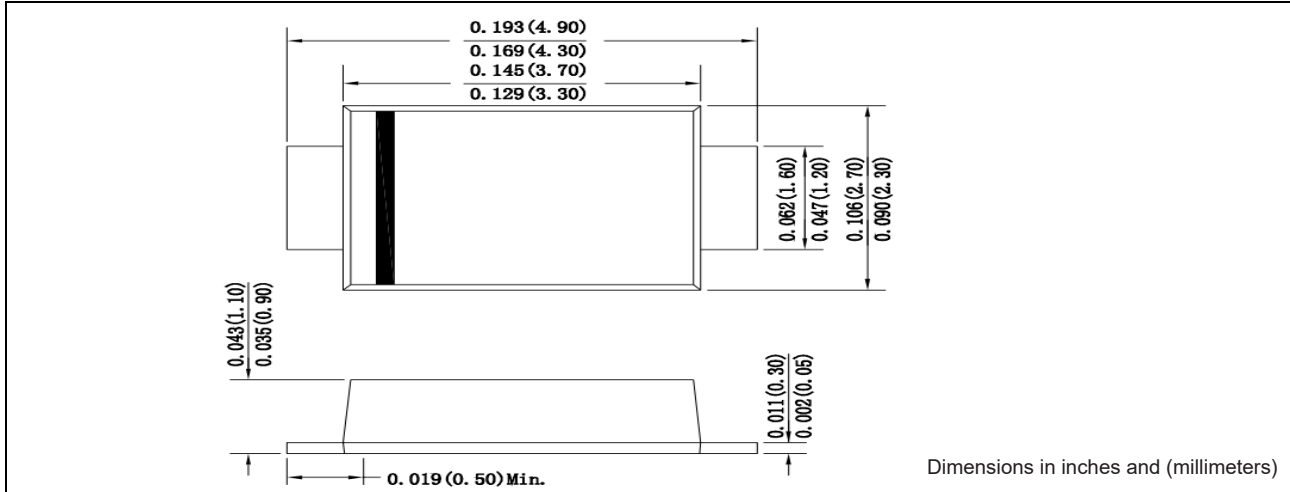
Parameter	SYMBOLS	SS52AF	SS54AF	SS56AF	SS58AF	SS510AF	SS515AF	SS520AF	UNITS
Maximum repetitive peak reverse voltage	V_{RRM}	20	40	60	80	100	150	200	V
Maximum RMS voltage	V_{RMS}	14	28	42	56	70	105	140	V
Maximum DC blocking voltage	V_{DC}	20	40	60	80	100	150	200	V
Maximum average forward rectified current at $T_L=100^\circ\text{C}$	$I_{(AV)}$	5.0							A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	120.0							A
Maximum instantaneous forward voltage at 5.0A	V_F	0.55	0.70	0.85		0.95		V	
Maximum DC reverse current at rated DC blocking voltage $T_A=25^\circ\text{C}$ $T_A=125^\circ\text{C}$	I_R	0.5 50		0.05 10		mA			
Typical thermal resistance	R_{qJA}	80.0							$^\circ\text{C/W}$
Operating junction temperature range	T_J	-55 to +150							$^\circ\text{C}$
Storage temperature range	T_{STG}	-55 to +150							$^\circ\text{C}$

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

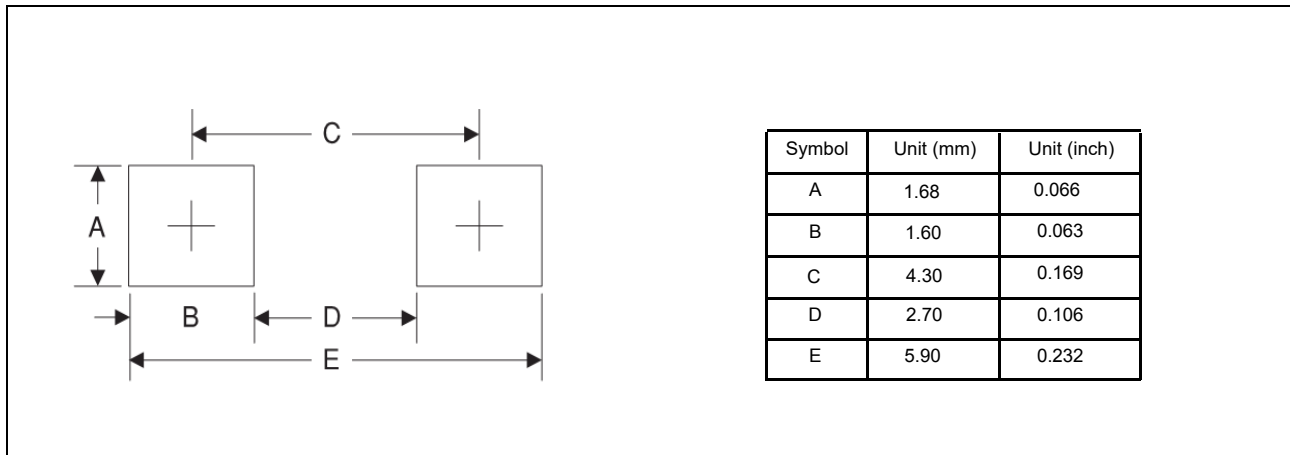
Typical Characteristics ($T_{amb} = 25\text{ }^{\circ}\text{C}$ unless otherwise specified)



Package Dimensions



PAD Dimensions



Ordering information

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

Revision history

Date	Revision	Changes
23-May-2012	1.0	Initial release

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