

**Surface Mount Schottky Barrier Rectifier**
**Reverse Voltage - 60V**
**Forward Current - 5 A**
**FEATURES**

- ◆ Metal silicon junction, majority carrier conduction
- ◆ For surface mounted applications
- ◆ Low power loss, high efficiency
- ◆ High forward surge current capability
- ◆ For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications
- ◆ Lead free in comply with EU RoHS 2011/65/EU directives

**MECHANICAL DATA**

- ◆ Case: SMBF
- ◆ Terminals: Solderable per MIL-STD-750, Method 2026
- ◆ Approx. Weight: 57mg / 0.002oz

**Absolute Maximum Ratings and Electrical characteristics**

Ratings at 25 ° ambient temperature unless otherwise specified. Single phase, half wave, 60Hz resistive or inductive load, for capacitive load, derate by 20 %

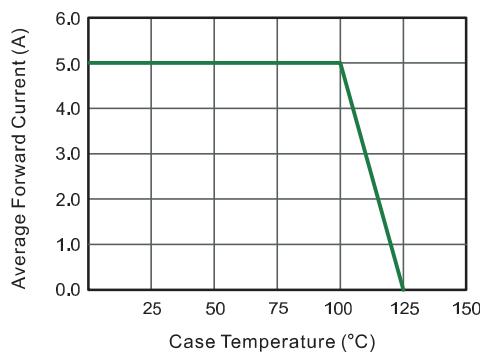
Pinning	
1.Cathode	2.Anode
1	2
<b>SMBF</b>	
Marking Code	
<b>SS56BFW</b>	<b>S56BW</b>

Parameter	Symbols	SS56BFW	Units
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	60	V
Maximum RMS voltage	$V_{RMS}$	42	V
Maximum DC Blocking Voltage	$V_{DC}$	60	V
Maximum Average Forward Rectified Current	$I_{F(AV)}$	5.0	A
Peak Forward Surge Current, 8.3ms Single Half Sine-wave Superimposed On Rated Load (JEDEC method)	$I_{FSM}$	80	A
Maximum Instantaneous Forward Voltage at 0.1 A at 1 A at 3A at 5 A	$V_F$	0.40 0.50 0.57 0.65	V
Maximum Instantaneous Reverse Current TA = 25°C at Rated DC Reverse Voltage TA = 100°C	$I_R$	1.0 50	mA
Operating Junction Temperature Range	$T_j$	-55 ~ +175	°C
Storage Temperature Range	$T_{stg}$	-55 ~ +150	°C

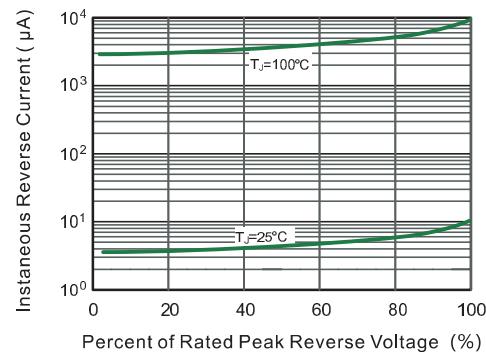
(1) Measured at 1 MHz and applied reverse voltage of 4 V D.C.

(2) P.C.B. mounted with 2.0" X 2.0" (5 X 5 cm) copper pad areas.

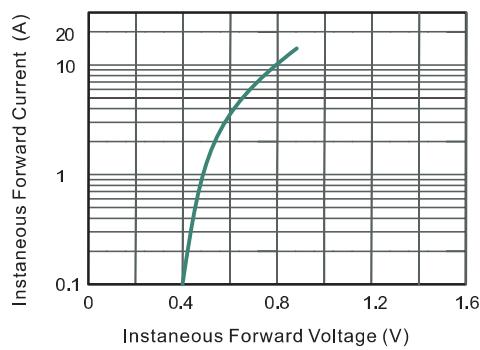
**Fig.1 Forward Current Derating Curve**



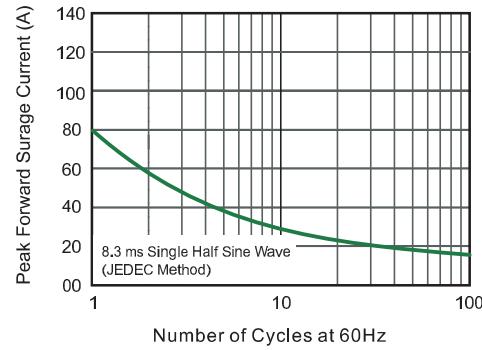
**Fig.2 Typical Reverse Characteristics**



**Fig.3 Typical Forward Characteristic**



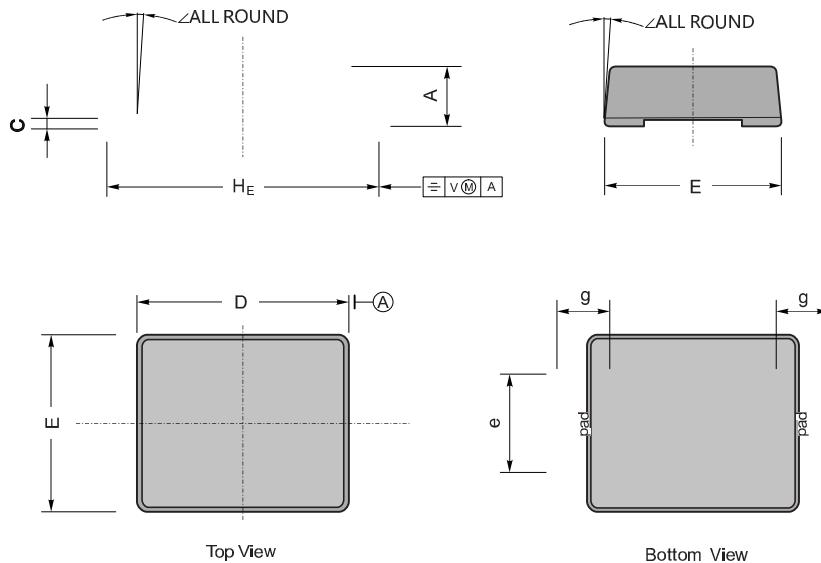
**Fig.4 Maximum Non-Repetitive Peak Forward Surge Current**



## Package Outline

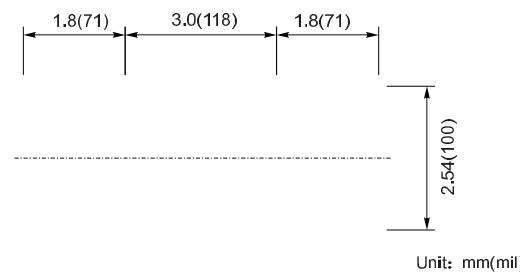
## SMBF

Plastic surface mounted package; 2leads



UNIT		A	C	D	E	$H_E$	e	g	$\angle$
mm	max	1.3	0.26	4.4	3.7	5.5	2.2	1.0	$9^\circ$
	min	1.1	0.18	4.2	3.5	5.1	1.9		
mil	max	51	10	173	146	216	86	40	$9^\circ$
	min	43	7	165	138	200	75		

### The recommended mounting pad size



Unit: mm(mil)

### Summary of Packing Options

Package	Packing Description	Packing Quantity	Industry Standard
SMBF	Tape/Reel,13"reel	5000	EIA-481-1