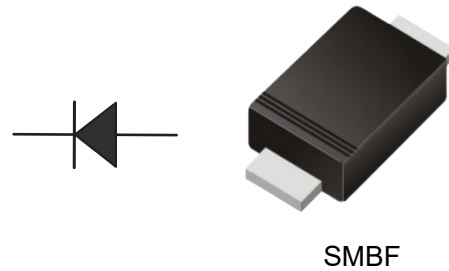


### Surface Mount Schottky Barrier Rectifier

Parameter	Value	Unit
$V_{RRM}$	20~200	V
$I_{F(AV)}$	5.0	A



SMBF

#### Features

- Metal silicon junction, majority carrier conduction
- For surface mounted applications
- Low power loss, high efficiency
- High forward surge current capability

#### Applications

- For use in low-voltage, high-frequency inverters, free-wheeling applications, DC/DC converters, and polarity protection circuits.

#### Absolute Maximum Ratings and Characteristics (Ta=25°C unless otherwise noted)

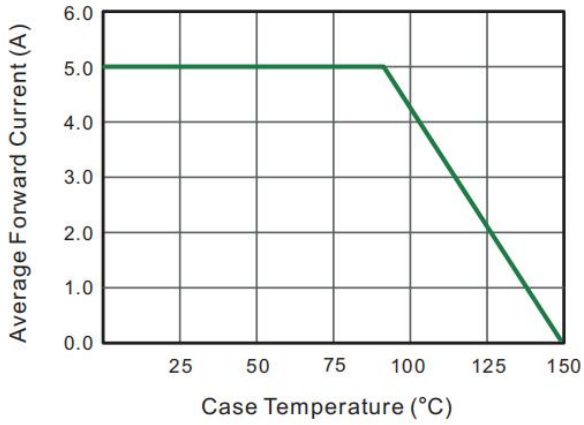
Parameter	Symbol	SS52BF	SS54BF	SS56BF	SS58BF	SS510BF	SS512BF	SS515BF	SS520BF	Units
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	20	40	60	80	100	120	150	200	V
Maximum RMS voltage	$V_{RMS}$	14	28	42	56	70	84	105	140	V
Maximum DC Blocking Voltage	$V_{DC}$	20	40	60	80	100	120	150	200	V
Maximum Average 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)	$I_{FSM}$	150								A
Max Instantaneous Forward Voltage at 5A	$V_F$	0.55		0.70		0.85				V
Maximum DC Reverse Current Ta=25°C at Rated DC Reverse Voltage Ta=100°C	$I_R$	0.5 5								mA
Typical Junction Capacitance <sup>(1)</sup>	$C_j$	800		500						pF
Typical Thermal Resistance <sup>(2)</sup>	$R_{\theta JA}$	45								°C/W
Operating Junction Temperature Range	$T_j$	-55 ~ +150								°C
Storage Temperature Range	$T_{stg}$	-55 ~ +150								°C

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

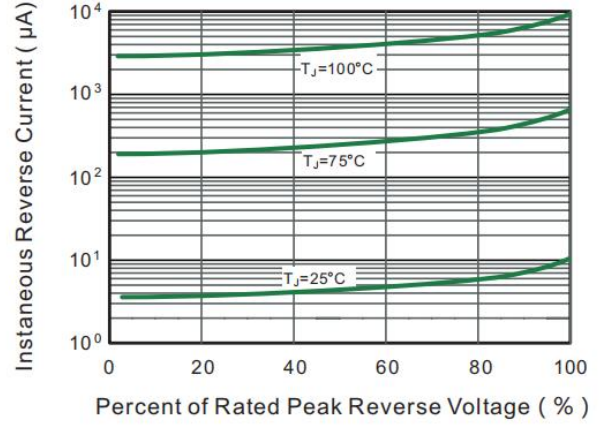
(2) P.C.B. mounted with 2.0" X 2.0" (5 X 5 cm) copper pad areas.

**Typical characteristics**

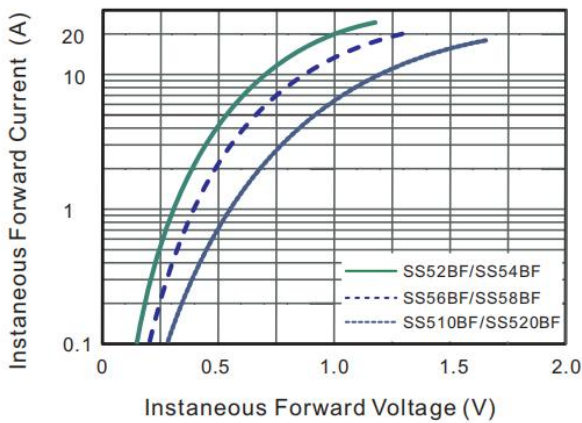
**Fig.1 Forward Current Derating Curve**



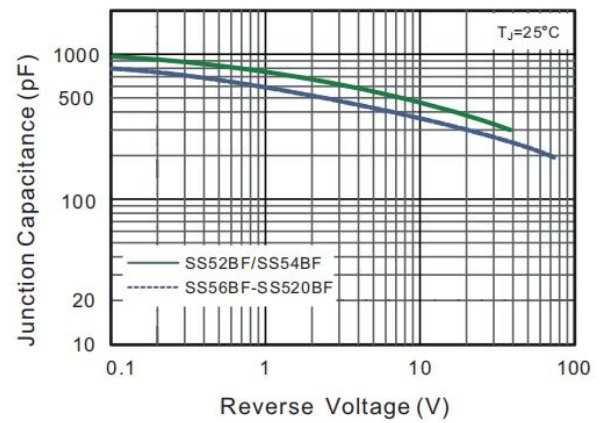
**Fig.2 Typical Reverse Characteristics**



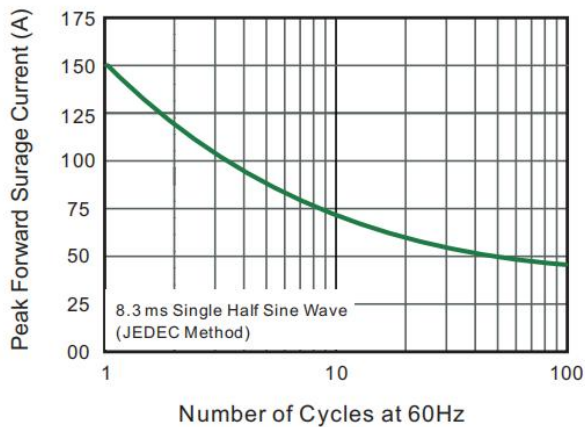
**Fig.3 Typical Forward Characteristic**



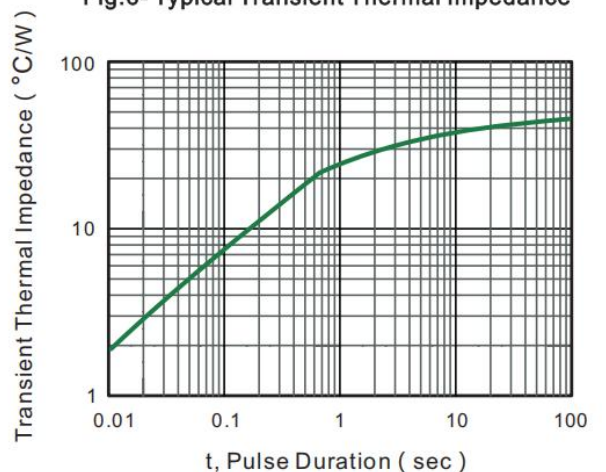
**Fig.4 Typical Junction Capacitance**



**Fig.5 Maximum Non-Repetitive Peak Forward Surge Current**

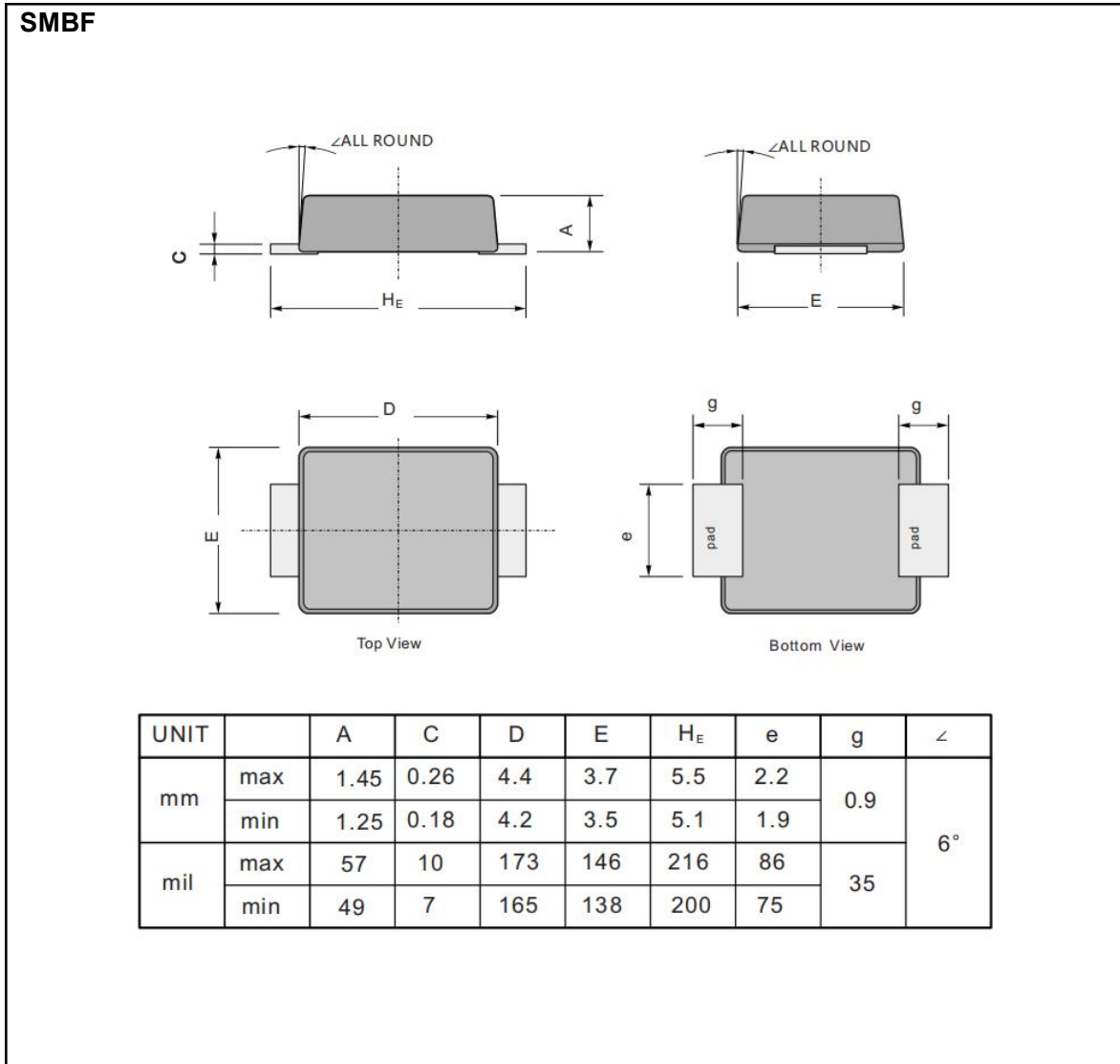


**Fig.6- Typical Transient Thermal Impedance**

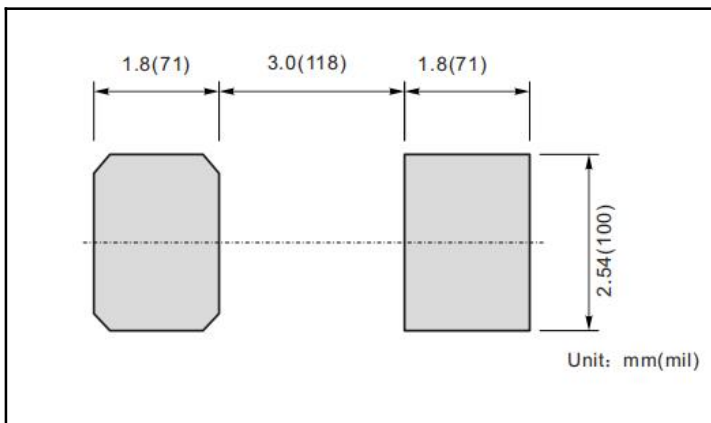


**Package Outlines**

Plastic surface mounted package; 2 leads



**The recommended mounting pad size**



**Marking**

Type number	Marking code
SS52BF	SS52BF
SS54BF	SS54BF
SS56BF	SS56BF
SS58BF	SS58BF
SS510BF	SS510BF
SS512BF	SS512BF
SS515BF	SS515BF
SS520BF	SS520BF

**\*Important Usage Information and Disclaimer**

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