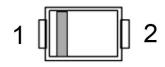



Features:

- Metal silicon junction, majority carrier conduction
- For surface mounted applications
- Low power loss, high efficiency
- Fast switching for high efficiency
- High forward surge current capability
- For use in low voltage, high frequency inverters


SMBF


1. Cathode 2. Anode


Absolute Maximum Ratings* (TA=25°C Unless otherwise noted)

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

Parameter	Symbols	CH1045BF	CH1060BF	CH10100BF	Units
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	45	60	100	V
Maximum RMS voltage	V _{RMS}	32	42	70	V
Maximum DC Blocking Voltage	V _{DC}	45	60	100	V
Maximum Average Forward Rectified Current	I _{F(AV)}		10.0		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 @10.0 A	V _F	0.55	0.70	0.85	V
Maximum DC Reverse Current T _j = 25°C at Rated DC Reverse Voltage T _j = 100°C	I _R		0.5 10		mA
Typical Thermal Resistance	R _{BJA}		35		°C/W
Operating Junction Temperature Range	T _j		-55 ~ +150		°C
Storage Temperature Range	T _{stg}		-55 ~ +150		°C

(1) 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

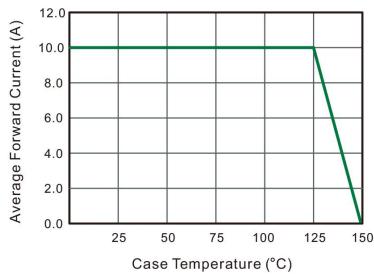


Fig.2 Typical Reverse Characteristics

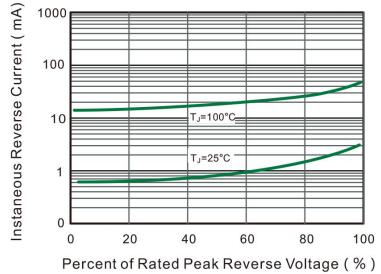


Fig.3 Typical Forward Characteristic

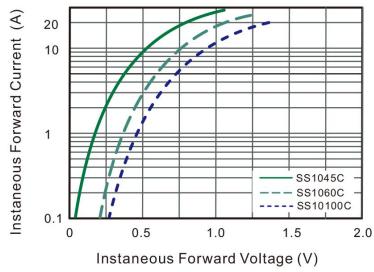


Fig.4- Typical Transient Thermal Impedance

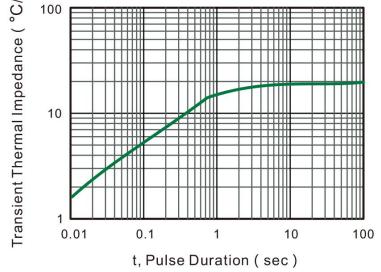
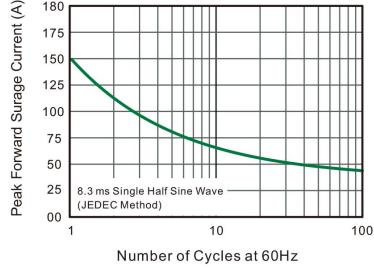
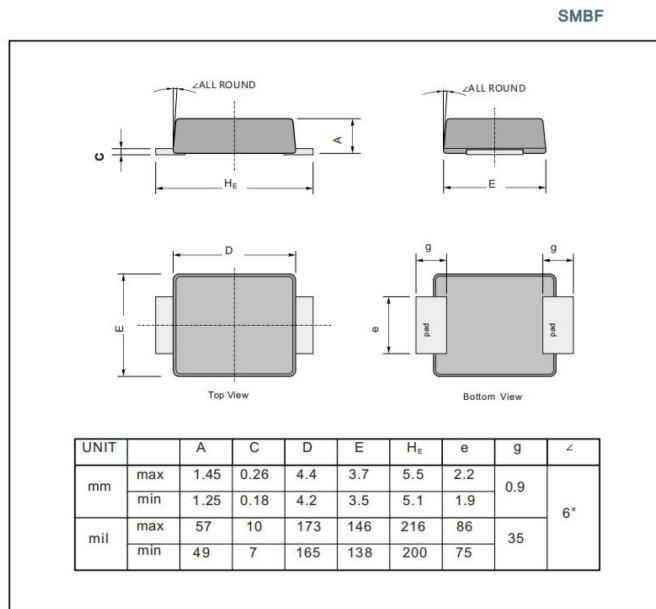


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current



Package Dimension



The recommended mounting pad size

