

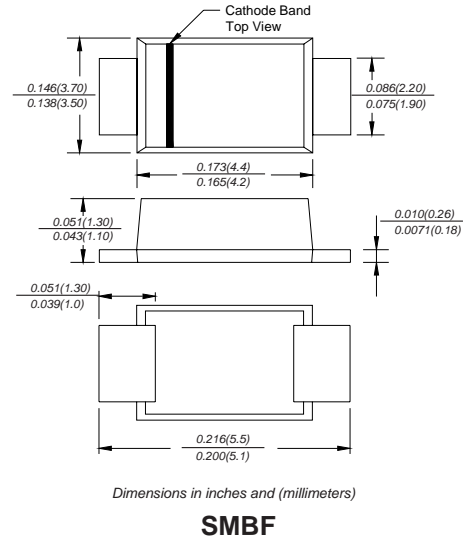
SS52BF---SS520BF

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

MECHANICAL DATA

Case: JEDEC SMBF molded plastic body
Terminals: leads solderable per MIL-STD-750, Method 2026
Mounting Position: Any
Weight:57mg/0.002oz



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

Catalog Number	SYMBOLS	SS52BF	SS54BF	SS56BF	SS58BF	SS510BF	SS515BF	SS520BF	UNITS
Maximum repetitive peak reverse voltage	V_{RRM}	20	40	60	80	100	150	200	VOLTS
Maximum RMS voltage	V_{RMS}	14	28	42	56	70	105	140	VOLTS
Maximum DC blocking voltage	V_{DC}	20	40	60	80	100	150	200	VOLTS
Maximum average forward rectified current at T_L (see fig.1)	$I_{(AV)}$				5.0				Amp
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}				150.0				Amps
Maximum instantaneous forward voltage at 5.0A	V_F	0.45	0.55	0.70	0.85		0.95		Volts
Maximum DC reverse current $T_A=25^\circ C$ at rated DC blocking voltage $T_A=100^\circ C$	I_R				1.0 50				mA
Typical junction capacitance (NOTE 1)	C_J	800			500				pF
Typical thermal resistance (NOTE 2)	$R_{\theta JA}$				40.0				°C/W
Operating junction temperature range	T_J				-50 to +125				°C
Storage temperature range	T_{STG}				-50 to +150				°C

Note:1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
 2.P.C.B. mounted with 0.2x0.2”(5.0x5.0mm) copper pad areas

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Fig.1 Forward Current Derating Curve

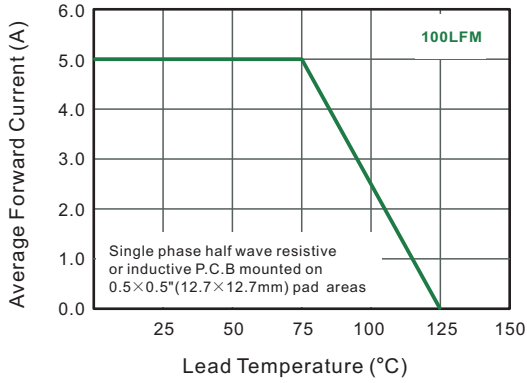


Fig.2 Typical Reverse Characteristics

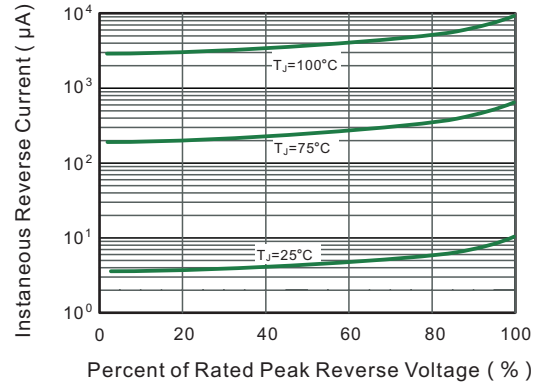


Fig.3 Typical Forward Characteristic

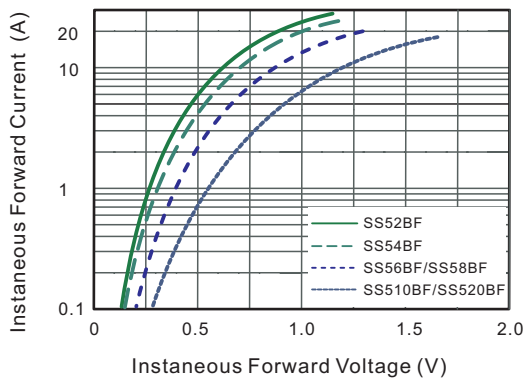


Fig.4 Typical Junction Capacitance

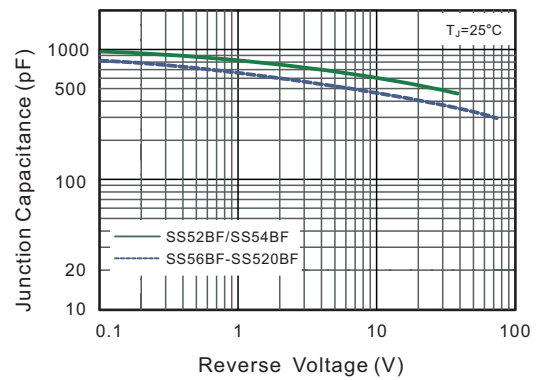


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

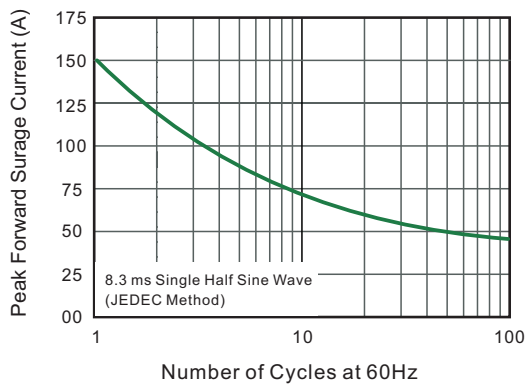


Fig.6- Typical Transient Thermal Impedance

