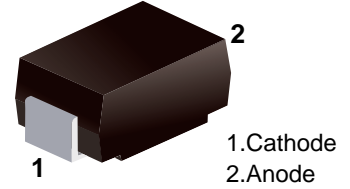


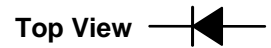
■ **Surface Mount Schottky Barrier Rectifier**

■ **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



■ **Simplified outline(SMB)**



■ **Maximum Ratings and Electrical characteristics**

Ratings at 25 °C ambient temperature unless otherwise specified.

Single phase half-wave 60 Hz, resistive or inductive load, for capacitive load current derate by 20 %.

Parameter	Symbols	SS52B	SS54B	SS56B	SS58B	SS510B	SS512B	SS515B	SS520B	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 5 A	V_F	0.55	0.70		0.85				V	
Maximum DC Reverse Current $T_a = 25^\circ\text{C}$ at Rated DC Reverse Voltage $T_a = 100^\circ\text{C}$	I_R	1.0 50	0.3 25				mA			
Typical Junction Capacitance ⁽¹⁾	C_j	500	300				pF			
Typical Thermal Resistance ⁽²⁾	$R_{\theta JA}$	50								$^\circ\text{C}/\text{W}$
Operating Junction Temperature Range	T_j	-55 ~ +150								$^\circ\text{C}$
Storage Temperature Range	T_{stg}	-55 ~ +150								$^\circ\text{C}$

(1) Measured at 1MHz 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

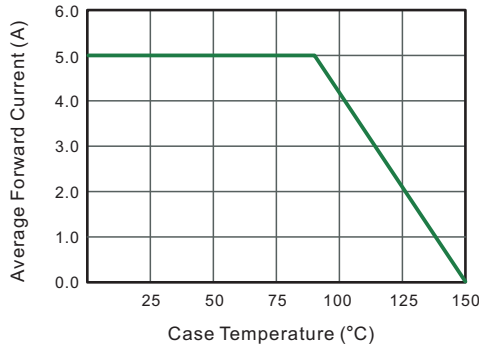


Fig.2 Typical Reverse Characteristics

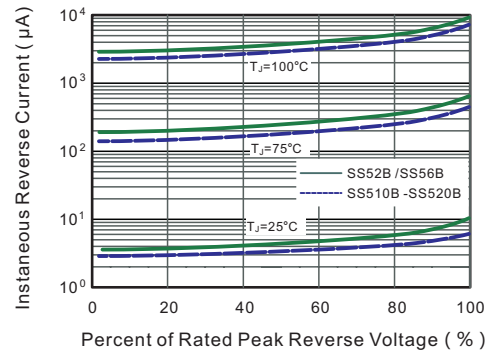


Fig.3 Typical Forward Characteristic

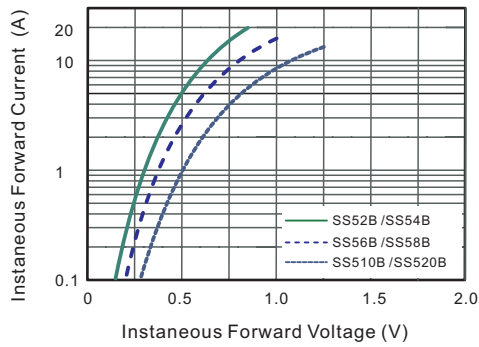


Fig.4 Typical Junction Capacitance

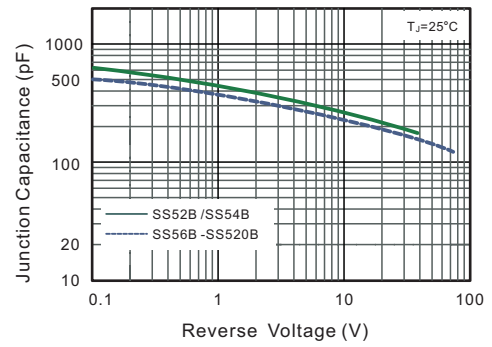


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

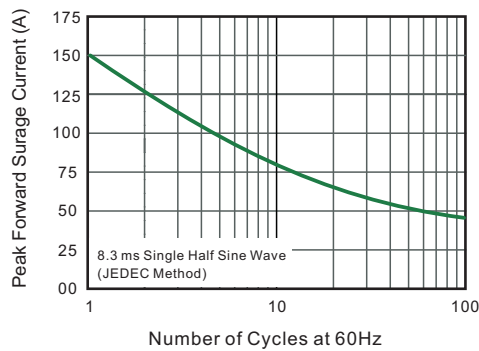
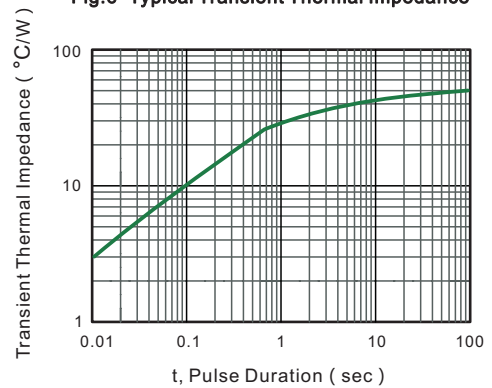
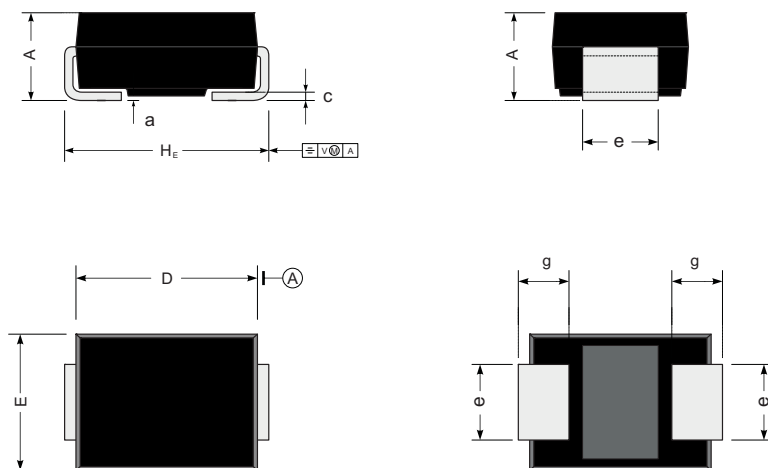


Fig.6- Typical Transient Thermal Impedance



■ SMB



UNIT		A	D	E	H _E	a	c	e	g
mm	max	2.44	4.83	3.94	5.59	0.21	0.305	2.2	1.5
	min	2.13	4.32	3.3	5.08	0.05	0.152	1.8	0.9
mil	max	96	190	155	220	8.3	12	87	59
	min	83	170	130	200	2.0	6	71	35

The recommended mounting pad size

