

Surface Mount Schottky Barrier Rectifier
 Reverse Voltage - 20 to 200V
 Forward Current - 2.0A

FEATURES

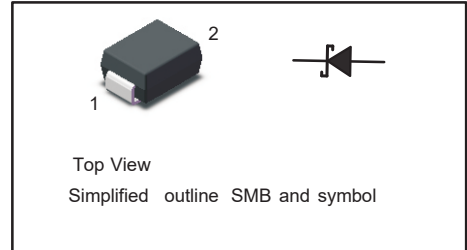
- Metal silicon junction, majority carrier conduction
- For surface mounted applications
- Low power loss, high efficiency
- High forward surge current capability
- For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications

MECHANICAL DATA

- Case : SMB
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight : 0.095g / 0.003oz

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode

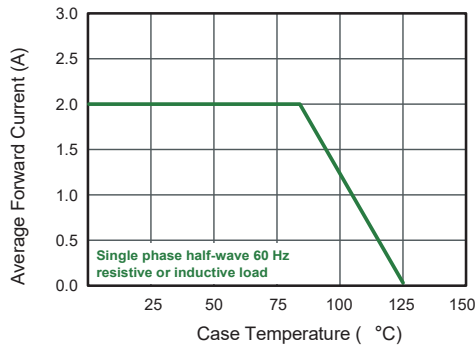
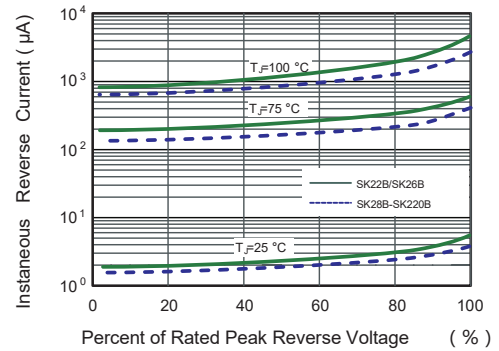
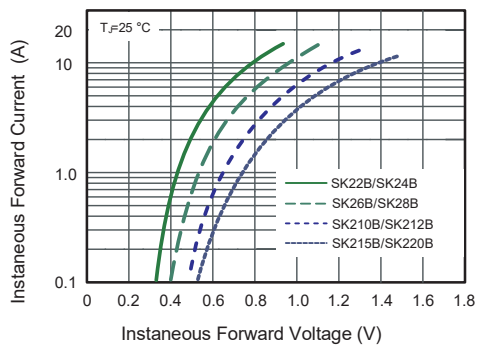
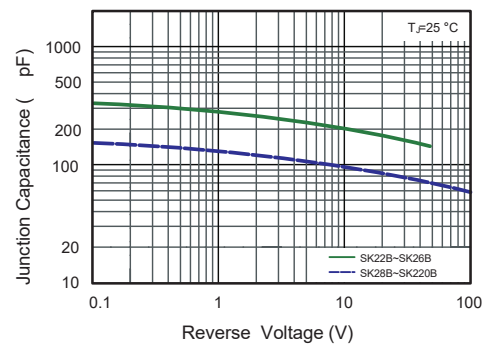
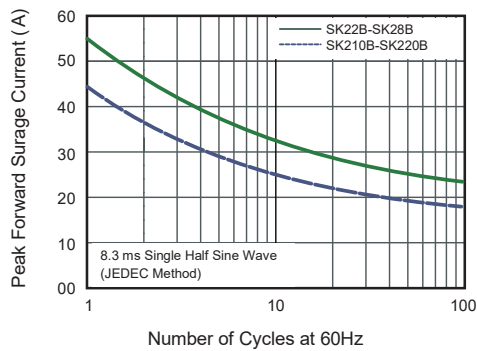
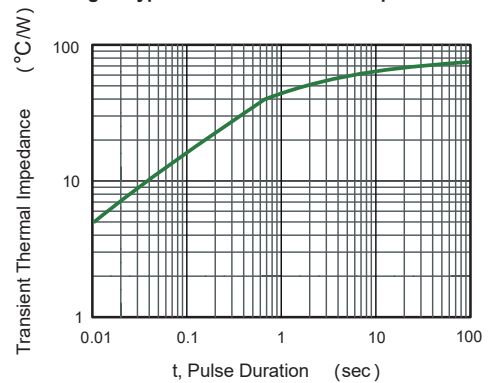

Absolute Maximum Ratings and Electrical characteristics

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

Parameter	Symbols	SK22B	SK24B	SK26B	SK28B	SK210B	SK212B	SK215B	SK220B	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	$I_{F(AV)}$	2.0								A	
Peak Forward Surge Current, 8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	55					45				A
Max Instantaneous Forward Voltage at 2 A	V_F	0.55		0.70		0.85		0.95		V	
Maximum DC Reverse Current at Rated DC Reverse Voltage $T_a = 25\text{ °C}$ $T_a = 100\text{ °C}$	I_R	0.5			0.3				mA		
		5			3						
Typical Junction Capacitance ⁽¹⁾	C_j	220				110				pF	
Typical Thermal Resistance ⁽²⁾	$R_{\theta JA}$	60								°C/W	
Operating Junction Temperature Range	T_j	-55 ~ +125								°C	
Storage Temperature Range	T_{stg}	-55 ~ +150								°C	

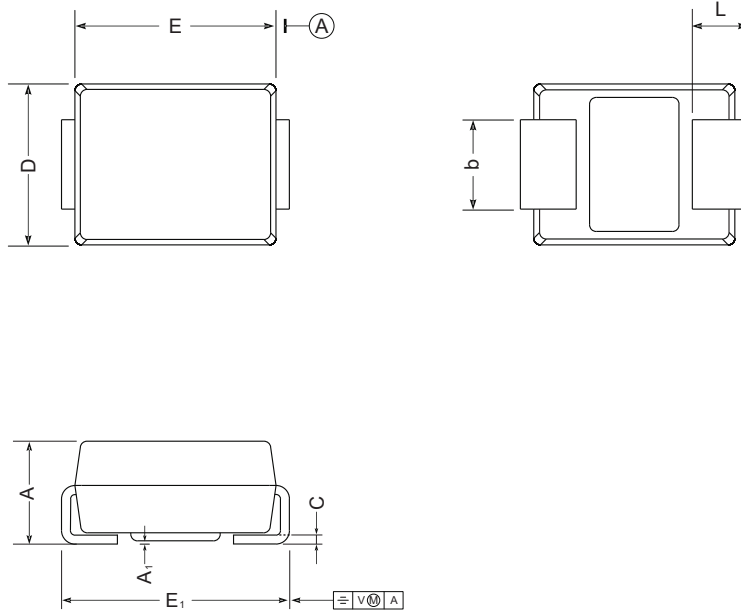
(1) Measured at 1 MHz and applied reverse voltage of 4 V D.C

(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 Typical Junction Capacitance

Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

Fig.6- Typical Transient Thermal Impedance


PACKAGE OUTLINE

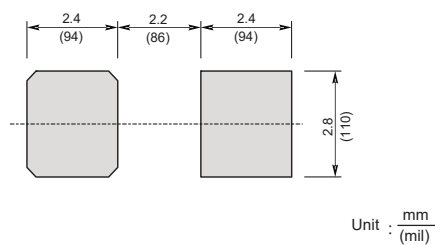
Plastic surface mounted package; 2 leads



SMB mechanical data

UNIT		A	E	D	E ₁	A ₁	L	C	b
mm	max	2.44	4.70	3.94	5.59	0.20	1.5	0.305	2.2
	min	2.13	4.06	3.3	5.08	0.05	0.8	0.152	1.9
mil	max	96	185	155	220	7.9	59	12	87
	min	84	160	130	200	2.0	32	6	75

The recommended mounting pad size



Marking

Type number	Marking code
SK22B	SS22
SK24B	SS24
SK26B	SS26
SK28B	SS28
SK210B	SS210
SK212B	SS212
SK215B	SS215
SK220B	SS220