

## Surface Mount Schottky Barrier Rectifier

Reverse Voltage - 20 to 200 V Forward Current - 3.0A

### Features

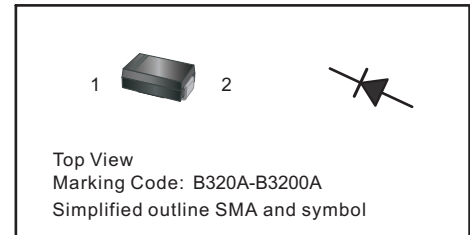
- Metal silicon junction, majority carrier conduction
- For surface mounted applications
- Low power loss, high efficiency
- High forward surge current capability
- For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications

### MECHANICAL DATA

- Case: SMA
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 60mg / 0.0021oz

### 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	B320AG	B340AG	B360AG	B380AG	B3100AG	B3120AG	B3150AG	B3200AG	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	$I_{F(AV)}$	3.0								A	
Peak Forward Surge Current, 8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	$I_{FSM}$	80					70				A
Max Instantaneous Forward Voltage at 3A	$V_F$	0.55		0.70		0.85		0.95		V	
Maximum DC Reverse Current $T_a = 25^\circ\text{C}$ at Rated DC Reverse Voltage $T_a = 100^\circ\text{C}$	$I_R$	0.5			0.3				mA		
		5			3						
Typical Junction Capacitance <sup>(1)</sup>	$C_j$	450			400				pF		
Typical Thermal Resistance <sup>(2)</sup>	$R_{\theta JA}$	70								°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

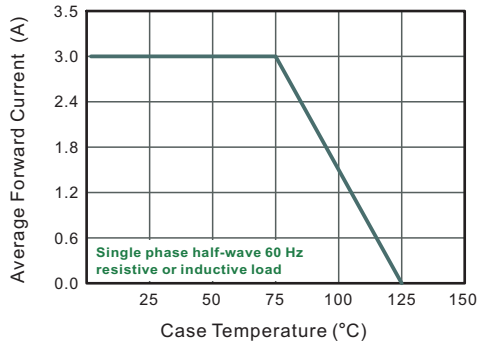


Fig.2 Typical Reverse Characteristics

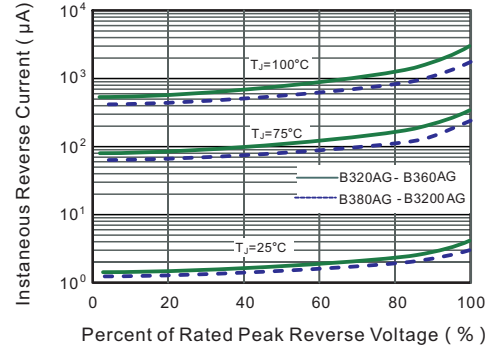


Fig.3 Typical Forward Characteristic

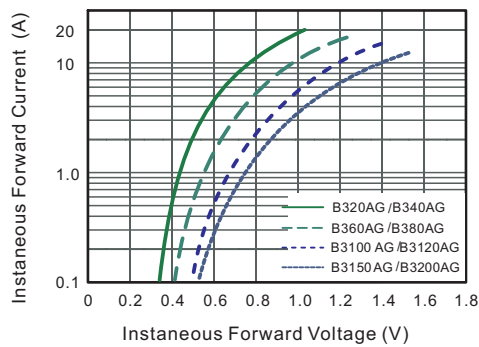


Fig.4 Typical Junction Capacitance

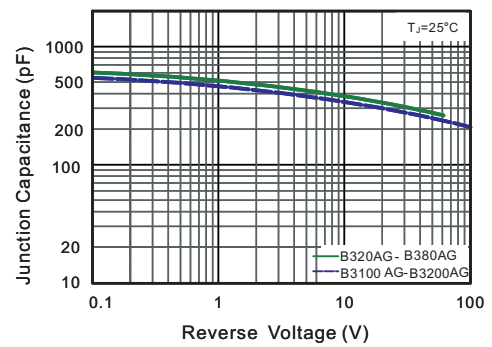


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

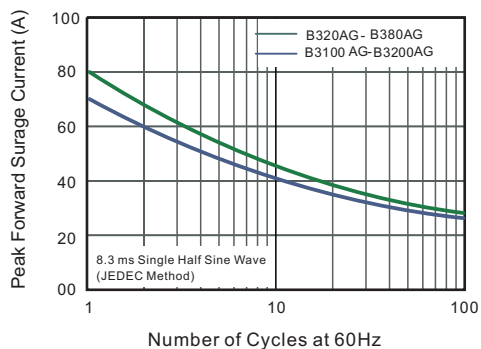
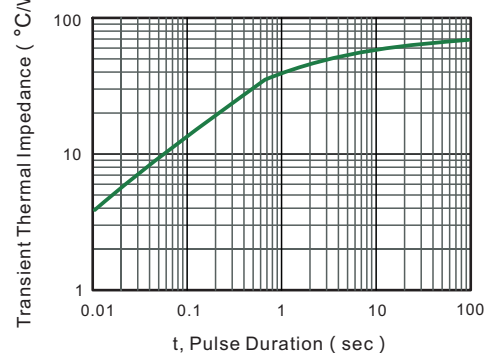


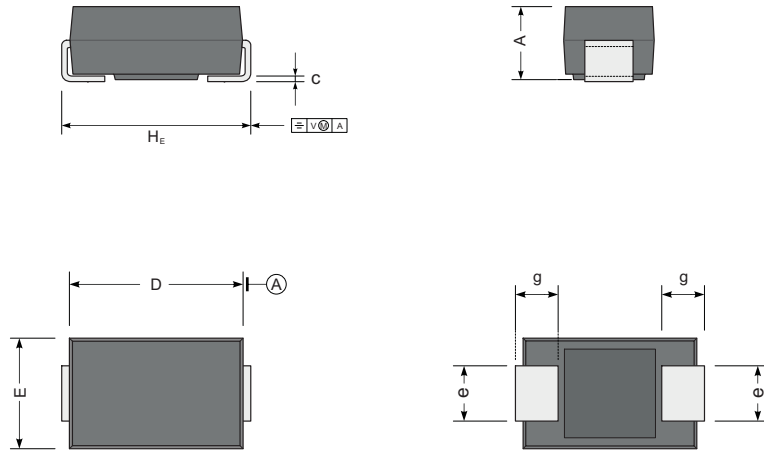
Fig.5- Typical Transient Thermal Impedance



## PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SMA



UNIT		A	D	E	$H_E$	c	e	g
mm	max	2.2	4.83	2.9	5.4	0.31	1.7	1.5
	min	1.9	4.32	2.3	4.7	0.12	1.2	0.9
mil	max	87	190	114	213	12	67	59
	min	75	170	91	185	5	47	35

### The recommended mounting pad size

