B320AG THRU B3200AG

Surface Mount Schottky Barrier Rectifier

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

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode

Top View
Marking Code: B320A-B3200A
Simplified outline SMA and symbol

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

Absolute Maximum Ratings and Electrical characteristics

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

Parameter		Symbol	B320 AG	B340 AG	B360 AG	B380 AG	B3100 AG	B3120 AG	B3150 AG	B3200 AG	Unit
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								A
Peak Forward Surge Current, 1.0ms Single Half Sine-wave Superimposed On Rated Load (JEDEC method)		I_{FSM}	160								A
I^2t Rating for fusing (3ms≤8.3ms)		I^2t	26.5								A^2S
Max Instantaneous Forward Voltage at 3A		V_F	0.55		0.70	0.85		0.95			V
Maximum DC Reverse Current at Rated DC Reverse Voltage	T_a = 25℃	I_R	0.5			0.3					mA
	T_a=100℃		5			3					
Typical Junction Capacitance(1)		C_j	135		107	83		68		50	pF
Typical Thermal Resistance(2)		$R_{\theta JA}$	100								℃/W
		$R_{\theta JC}$	20								
		$R_{\theta JL}$	25								
Operating Junction Temperature		T_j	-55~+125								℃
Storage Temperature Range		T_{stg}	-55~+150								℃

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

(2)P.C.B. mounted with 0.2”x0.2”(5×5mm) copper pad areas

Typical Characteristics

Fig.1 Forward Current Derating Curve

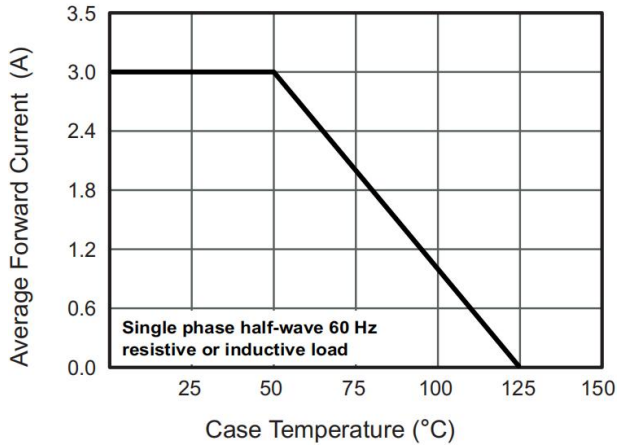


Fig.2 Typical Reverse Characteristics

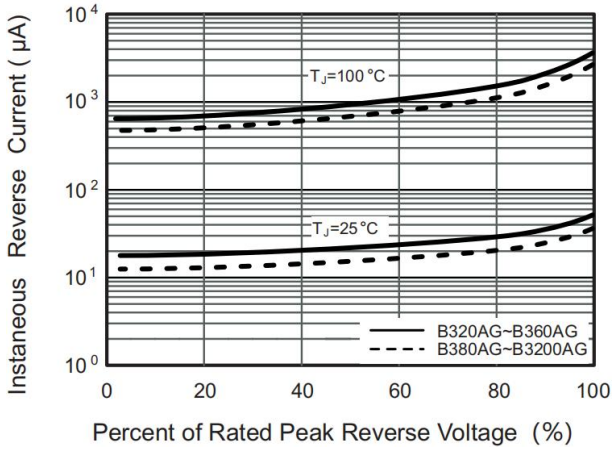


Fig.3 Typical Forward Characteristic

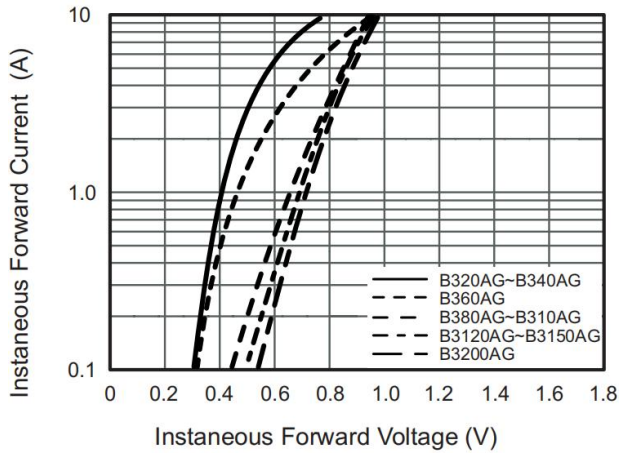


Fig.4 Typical Junction Capacitance

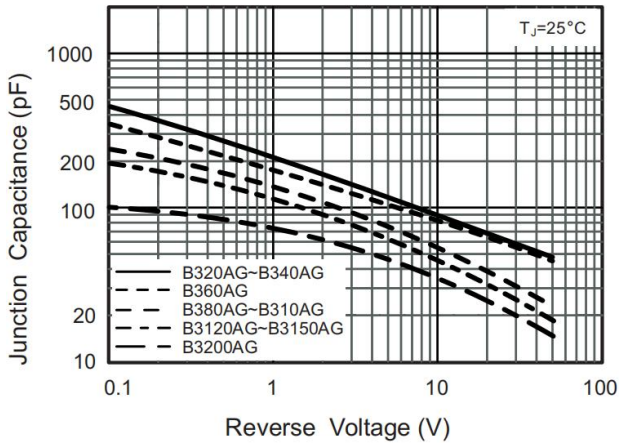
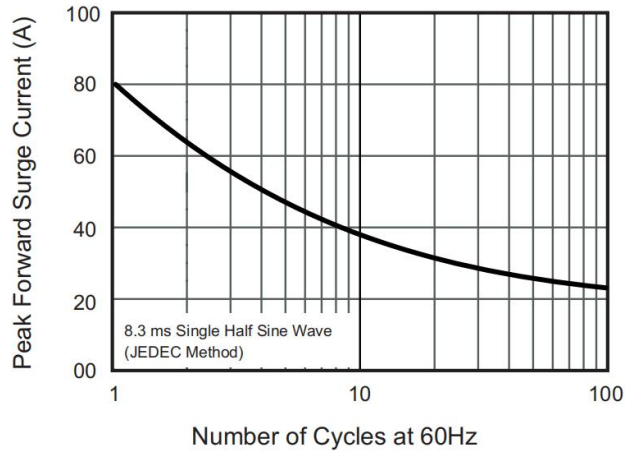


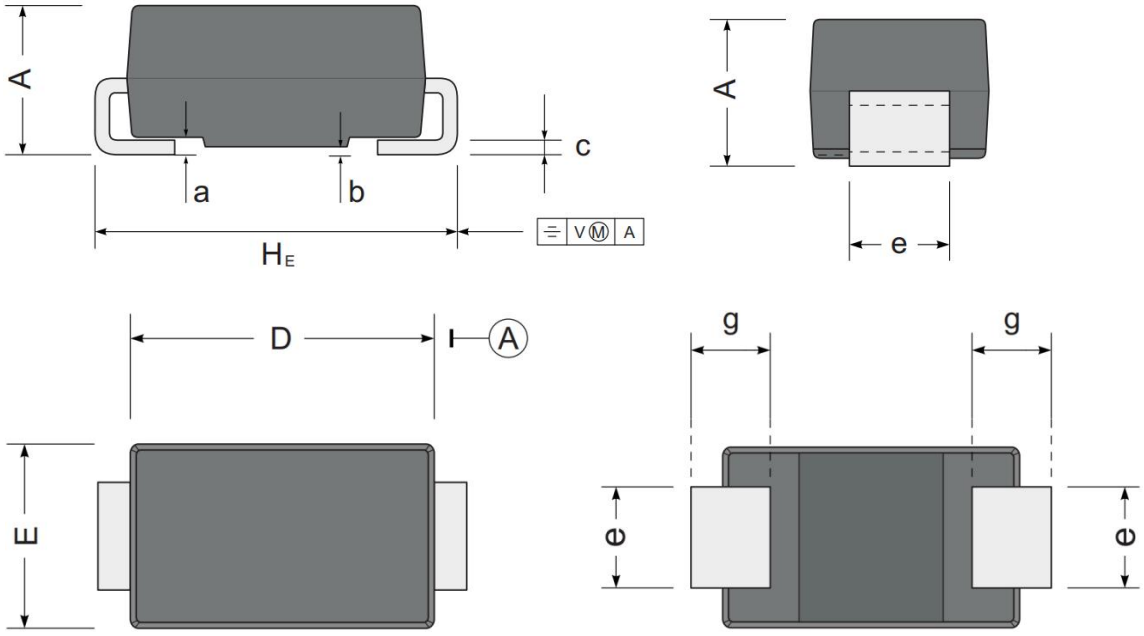
Fig.5 Maximum Non-Repetitive Peak Forward Surge Current



Package Information

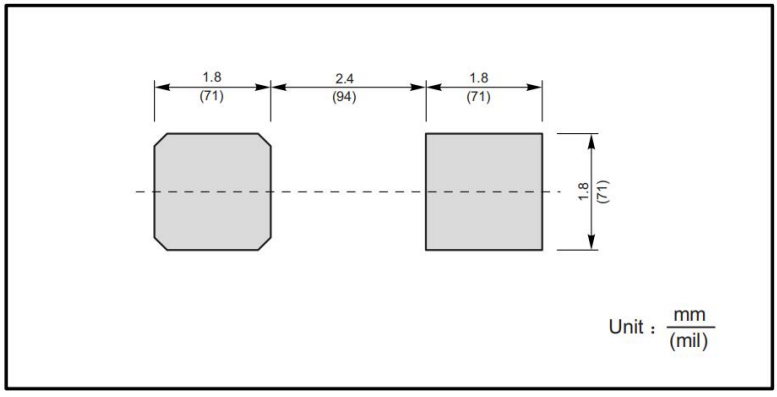
SMA

Dimensions in mm



UNIT		A	D	E	H_E	c	e	g	b	a
mm	max	2.2	4.5	2.7	5.2	0.31	1.6	1.5	0.2	0.3
	min	1.9	4.0	2.3	4.7	0.15	1.3	0.9	0.05	
mil	max	87	181	106	205	12	63	59	7.9	12
	min	75	157	91	185	6	51	35	2	

The recommended mounting pad size



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