



SS32G THRU SS320G

Surface Mount Schottky Barrier Rectifier

Reverse Voltage -20V to 200V

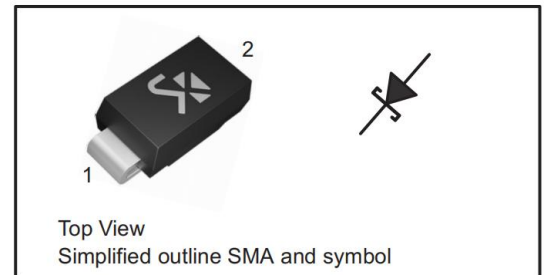
Forward Current -3.0A

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

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		Symbol	SS 32G	SS 34G	SS 345G	SS 36G	SS 38G	SS 310G	SS 312G	SS 315G	SS 320G	Unit
Maximum Repetitive Peak Reverse Voltage		V _{RRM}	20	40	45	60	80	100	120	150	200	V
Maximum RMS Voltage		V _{RMS}	14	28	32	42	56	70	84	105	140	V
Maximum DC Blocking Voltage		V _{DC}	20	40	45	60	80	100	120	150	200	V
Maximum Average Forward Rectified Current@Fig.1		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 ² t Rating for fusing (3ms≤8.3ms)		I ² t	26.5									A ² S
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 _{θJA}	100									℃/W
		R _{θJC}	20									
		R _{θJL}	25									
Operating Junction Temperature Range		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" (5x5mm) copper pad areas



SS32G THRU SS320G

Typical Characteristics

Fig.1 Forward Current Derating Curve

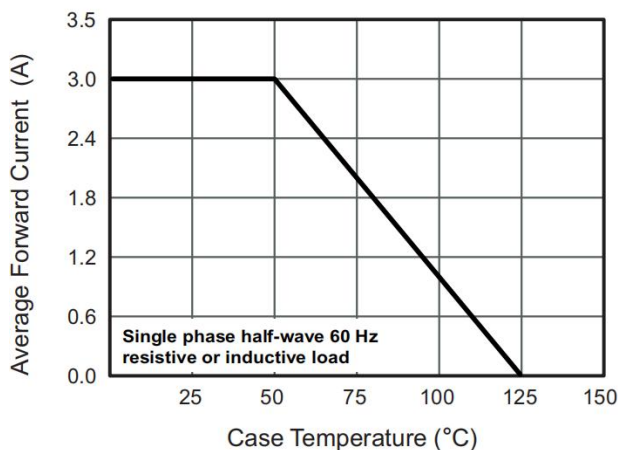


Fig.2 Typical Reverse Characteristics

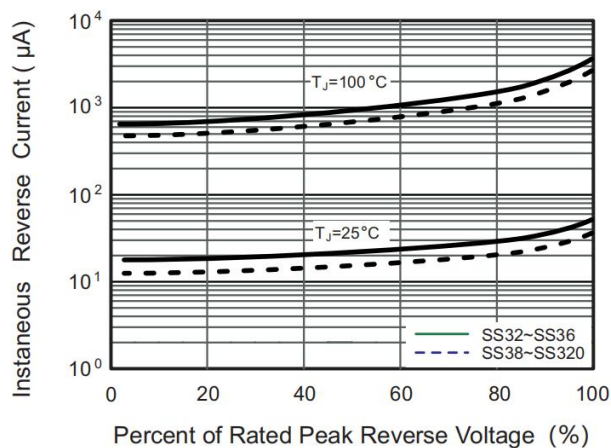


Fig.3 Typical Forward Characteristic

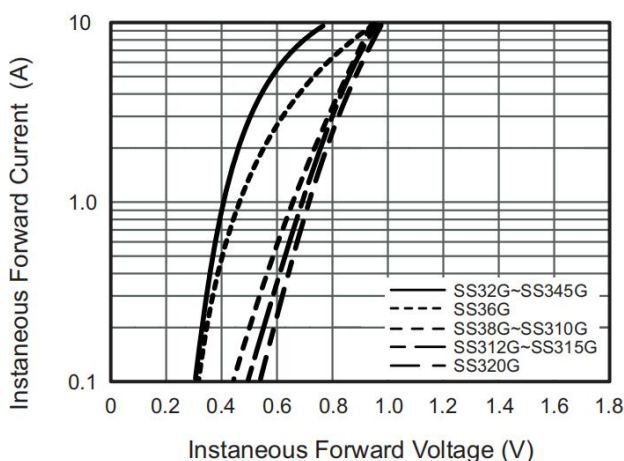


Fig.4 Typical Junction Capacitance

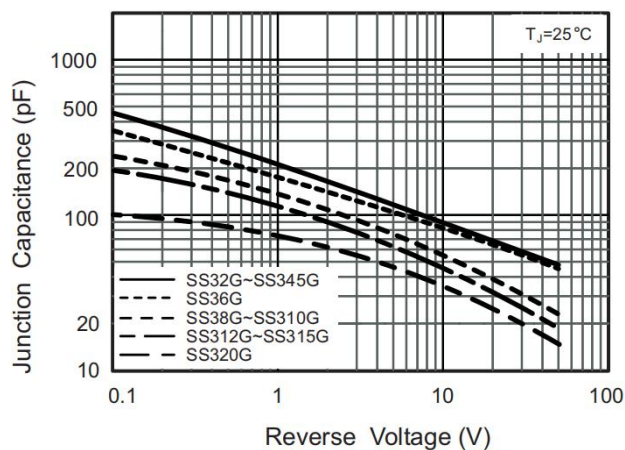
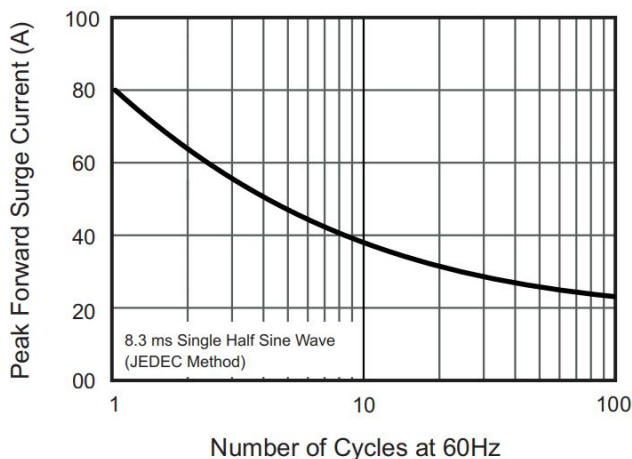


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current



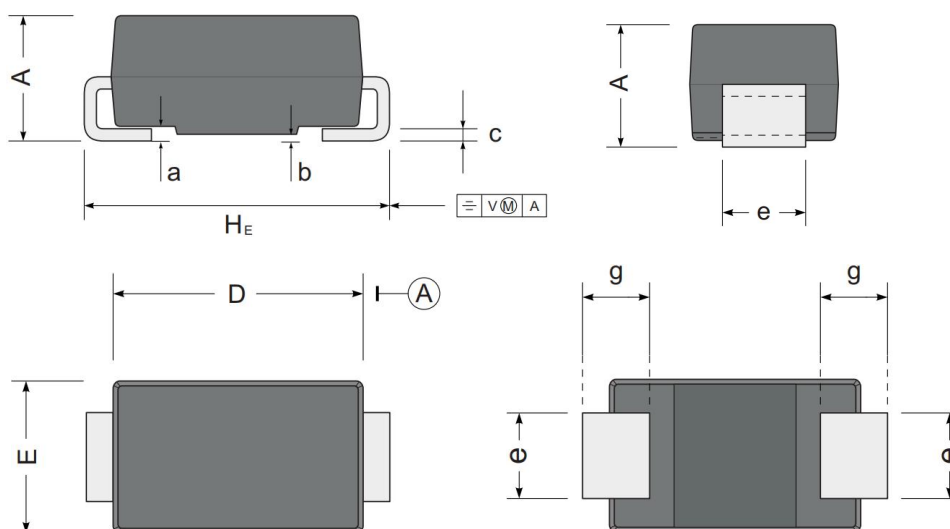


SS32G THRU SS320G

Package Information

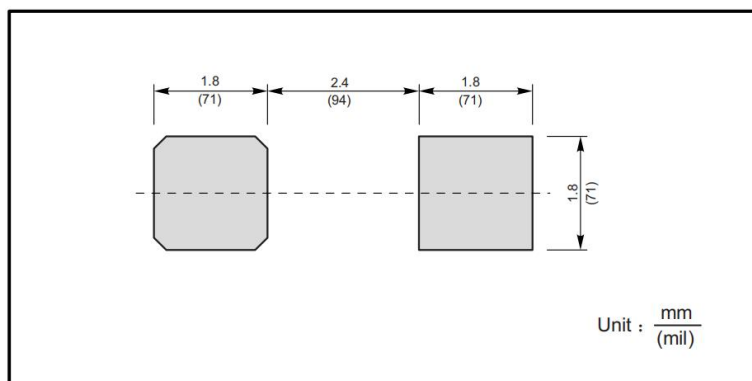
SMA

Dimensions in mm



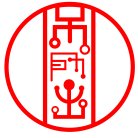
UNIT		A	D	E	H _E	c	e	g	b	a
mm	max	2.2	4.5	2.7	5.2	0.31	1.6	1.5	0.2	0.3
	min	1.9	4.0	2.3	4.7	0.15	1.3	0.9	0.05	
mil	max	87	181	106	205	12	63	59	7.9	12
	min	75	157	91	185	6	51	35	2	

The recommended mounting pad size



Marking

Type number	Marking code
SS32G	SS32
SS34G	SS34
SS345G	SS345
SS36G	SS36
SS38G	SS38
SS310G	SS310
SS312G	SS312
SS315G	SS315
SS320G	SS320



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