

Surface Mount Schottky Barrier Rectifier

Reverse Voltage - 20 to 200 V

Forward Current - 3.0A

Features

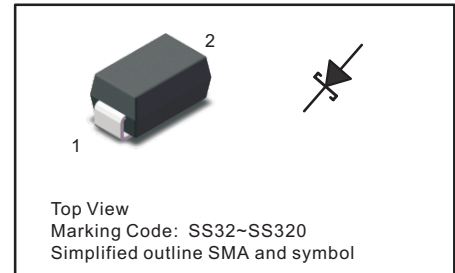
- Metal silicon junction, majority carrier conduction
- For surface mounted applications
- Low power loss, high efficiency
- High forward surge current capability
- For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications

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	SS32G	SS34G	SS34AG	SS36G	SS38G	SS310G	SS312G	SS315G	SS320G	Units
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	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
Max Instantaneous Forward Voltage at 3 A	V _F	0.55			0.70	0.85			0.95		V
Maximum DC Reverse Current T _a = 25°C at Rated DC Reverse Voltage T _a =100°C	I _R	0.5 5				0.3 3				mA	
Typical Junction Capacitance ⁽¹⁾	C _j	250			180						pF
Typical Thermal Resistance ⁽²⁾	R _{θJA}	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

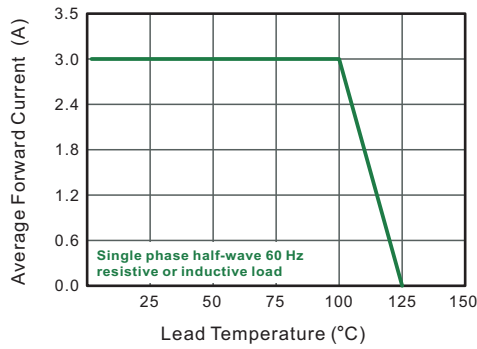


Fig.2 Typical Reverse Characteristics

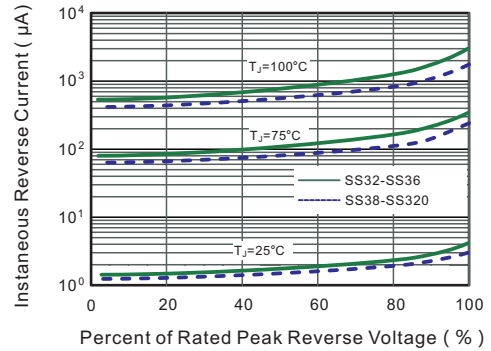


Fig.3 Typical Forward Characteristic

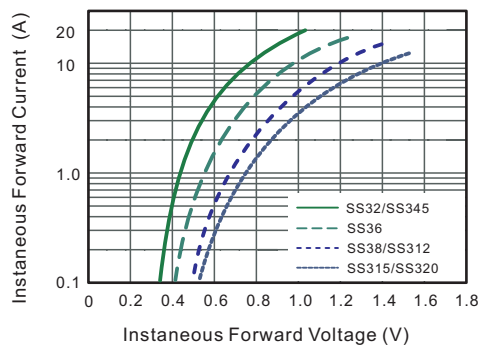


Fig.4 Typical Junction Capacitance

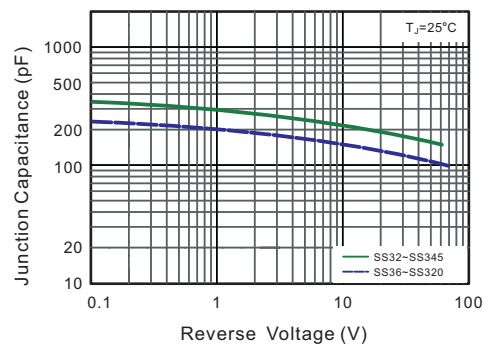


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

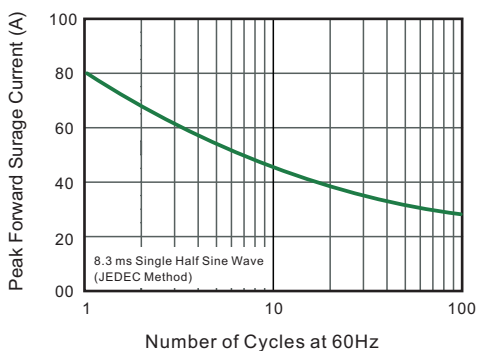
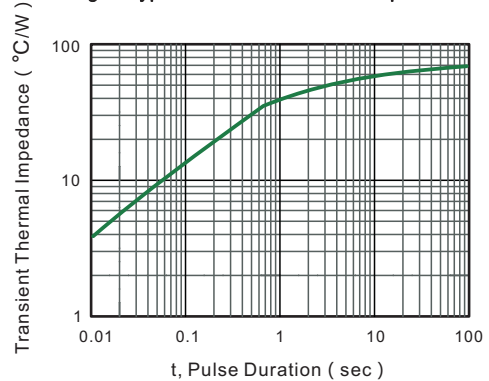


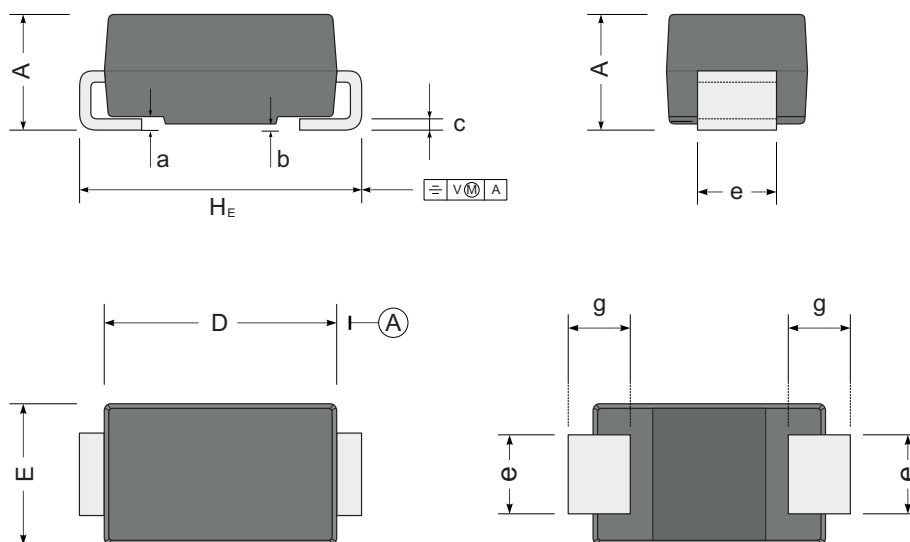
Fig.5- Typical Transient Thermal Impedance



PACKAGE OUTLINE

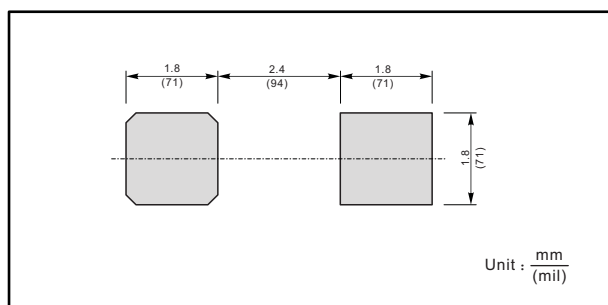
Plastic surface mounted package; 2 leads

SMA



UNIT		A	D	E	H _E	c	e	g	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
SS34AG	SS34A
SS36G	SS36
SS38G	SS38
SS310G	SS310
SS312G	SS312
SS315G	SS315
SS320G	SS320