

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
- Moisture sensitivity level: Level 3
- For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications

MECHANICAL DATA

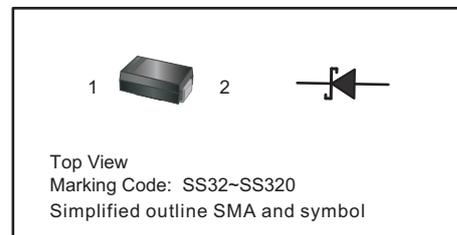
- Case: SMA
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 60mg / 0.0021oz

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 %

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



Parameter	Symbols	SS32A	SS34A	SS35A	SS36A	SS38A	SS310A	SS312A	S315A	S320A	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	31.5	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 3A	V_F	0.55	0.70			0.85		0.95			V
Maximum DC Reverse Current $T_a = 25^{\circ}C$ at Rated DC Reverse Voltage $T_a = 100^{\circ}C$	I_R	0.5 5				0.3 3					mA
Typical Junction Capacitance ⁽¹⁾	C_j	450				400					pF
Typical Thermal Resistance ⁽²⁾	$R_{\theta JA}$	70									$^{\circ}C/W$
Operating Junction Temperature Range	T_j	-55 ~ +150									$^{\circ}C$
Storage Temperature Range	T_{stg}	-55 ~ +150									$^{\circ}C$

(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

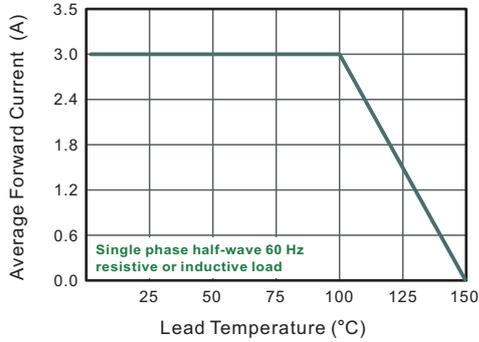


Fig.2 Typical Reverse Characteristics

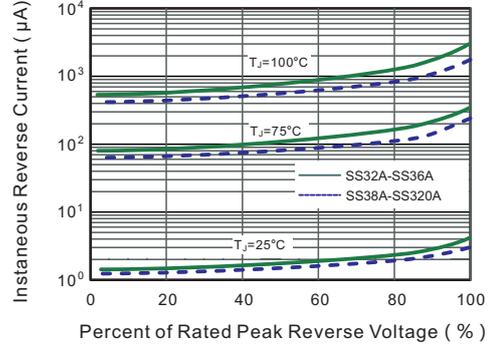


Fig.3 Typical Forward Characteristic

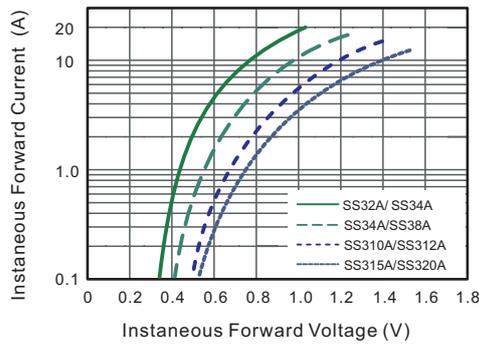


Fig.4 Typical Junction Capacitance

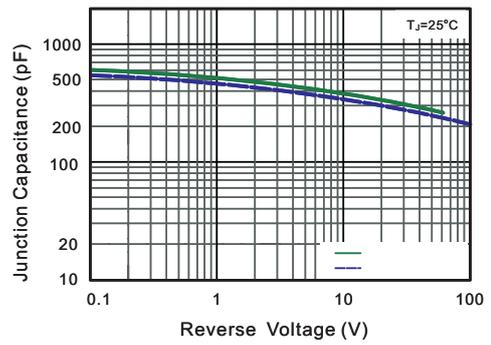


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

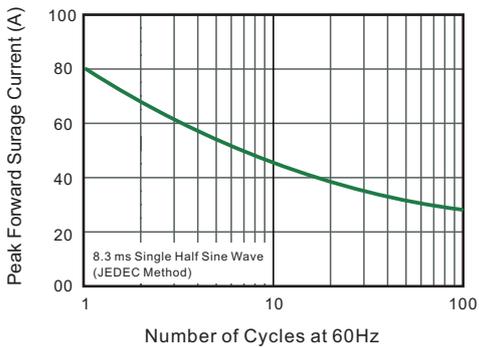
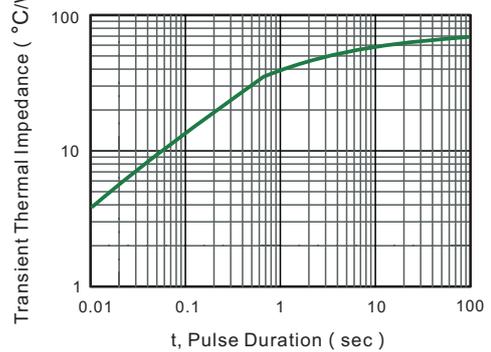
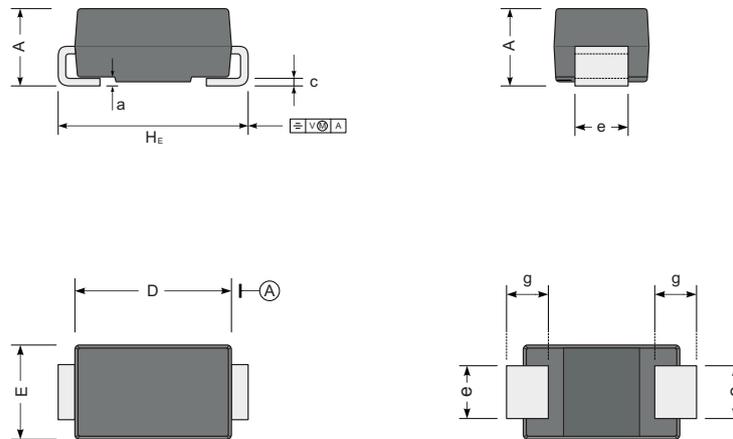


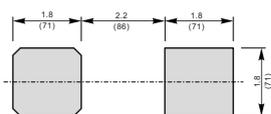
Fig.5- Typical Transient Thermal Impedance





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

The recommended mounting pad size



Unit : $\frac{\text{mm}}{\text{mil}}$

Marking

Type number	Marking code
SS32A	SS32
SS34A	SS34
SS35A	SS35
SS36A	SS36
SS38A	SS38
SS310A	SS310
SS312A	SS312
SS315A	SS315
SS320A	SS320

Ordering Information

Part Number	Delivery Mode	Quantity(pcs/reel)
SS32A-SS320A	Tape & Reel	2000