

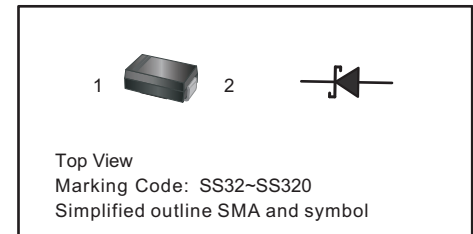
SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

FEATURES

- High Performance and Reliability best suited for Automotive Application
- 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



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 %

Parameter	Symbols	SS32A	SS34A	SS36A	SS38A	SS310A	SS312A	SS315A	SS320A	Units
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	20	45	60	80	100	120	150	200	V
Maximum RMS voltage	V _{RMS}	14	31.5	42	56	70	84	105	140	V
Maximum DC Blocking Voltage	V _{DC}	20	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 Typical T _a =100°C	I _R	0.5 5			0.3 3				mA	
Junction Capacitance ⁽¹⁾	C _j	450			400				pF	
Typical Thermal Resistance ⁽²⁾	R _{θJA}	70								°C/W
Operating Junction Temperature Range	T _j	-55 ~ +150								°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.

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RATING AND CHARACTERISTIC CURVES SS32A - SS320A

Fig.1 Forward Current Derating Curve

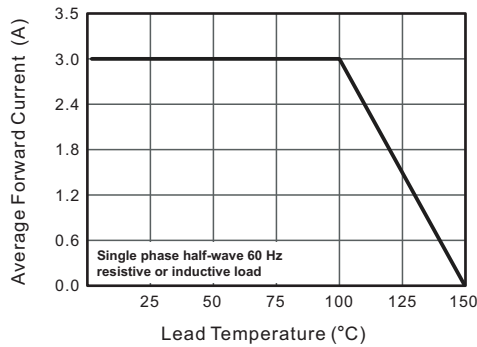


Fig.2 Typical Reverse Characteristics

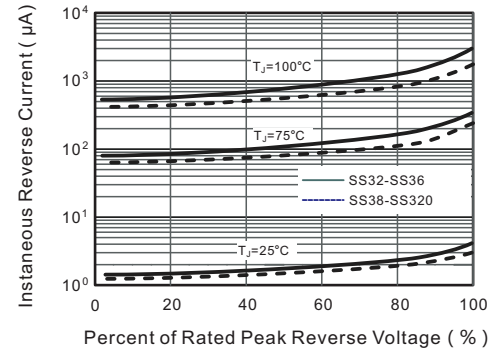


Fig.3 Typical Forward Characteristic

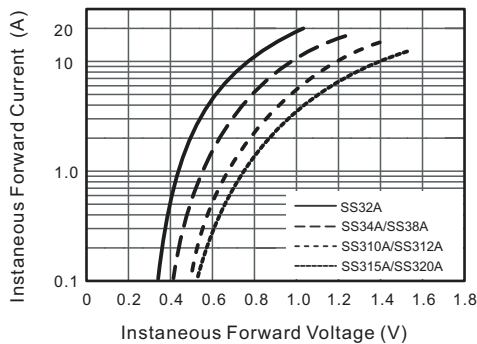


Fig.4 Typical Junction Capacitance

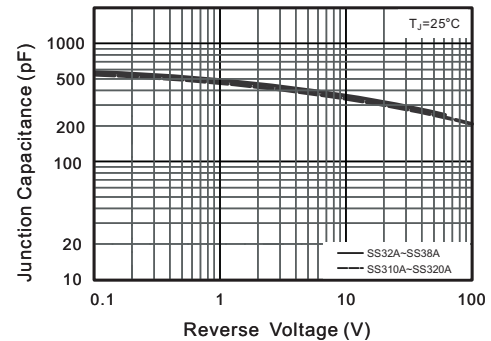


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

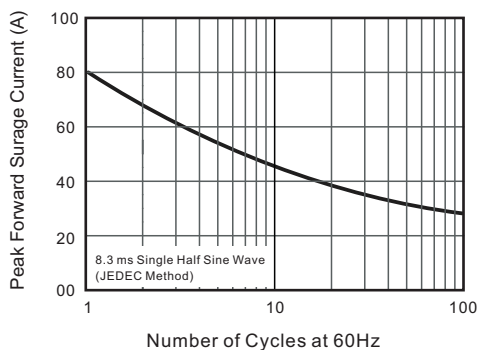
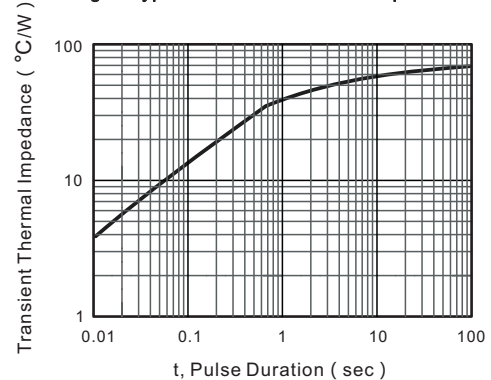


Fig.5- Typical Transient Thermal Impedance

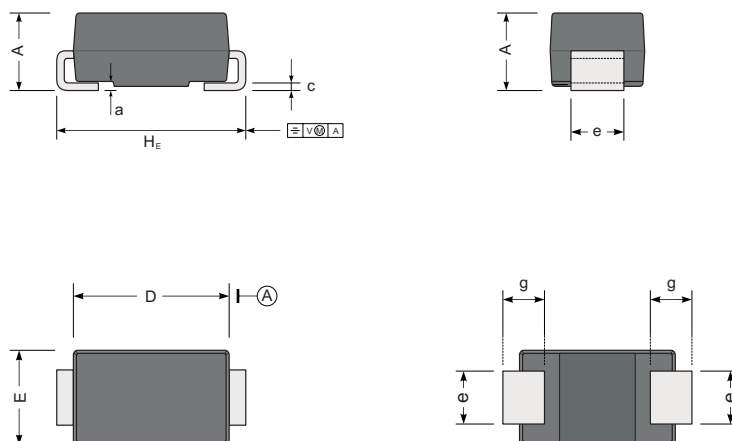


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PACKAGE OUTLINE

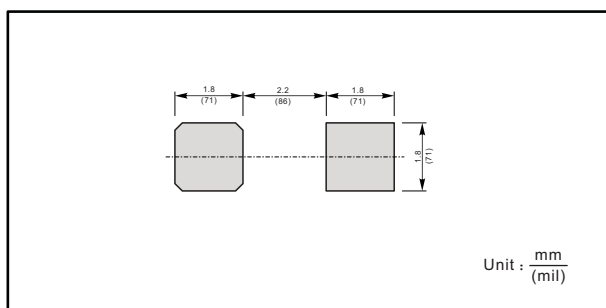
Plastic surface mounted package; 2 leads

SMA



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



Marking

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

Disclaimer

All product, product specifications and data are subject to change without notice to improve reliability, function or design or otherwise.