

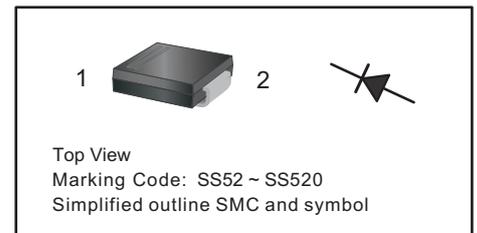
SURFACE MOUNT SCHOTTKY BARRIER RECTIFIERS

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



MECHANICAL DATA

- Case: SMC
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 217mg / 0.0077oz

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	SS52	SS54	SS56	SS58	SS510	SS512	SS515	SS520	Units
Maximum Repetitive Peak Reverse Voltage	VRRM	20	40	60	80	100	120	150	200	V
Maximum RMS voltage	VRMS	14	28	42	56	70	84	105	140	V
Maximum DC Blocking Voltage	VDC	20	40	60	80	100	120	150	200	V
Maximum Average Forward Rectified Current	IF(AV)	5.0								A
Peak Forward Surge Current, 8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	IFSM	175				150				A
Max Instantaneous Forward Voltage at 5 A	VF	0.45	0.55	0.70		0.85				V
Maximum DC Reverse Current Ta = 25°C at Rated DC Reverse Voltage Ta = 100°C	IR					1.0 50				mA
Typical Junction Capacitance (1)	Cj	600			400					pF
Typical Thermal Resistance (2)	RθJA	35								°C/W
Operating Junction Temperature Range	Tj	-55 ~ +150								°C
Storage Temperature Range	Tstg	-55 ~ +150								°C

Notes:

- (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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RATINGS AND CHARACTERISTIC CURVES SS52 - SS520

Fig.1 Forward Current Derating Curve

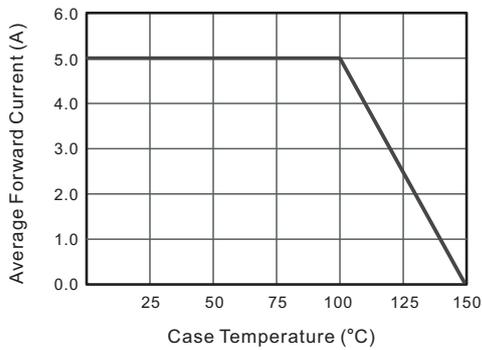


Fig.2 Typical Reverse Characteristics

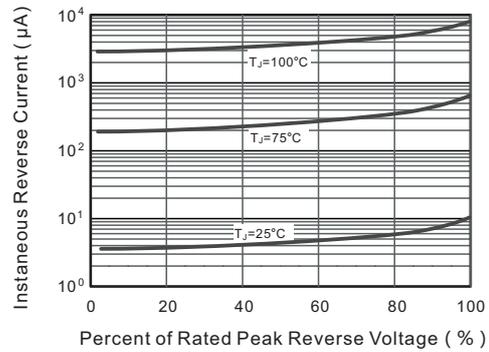


Fig.3 Typical Forward Characteristic

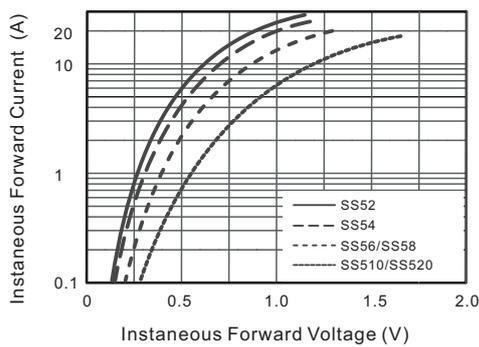


Fig.4 Typical Junction Capacitance

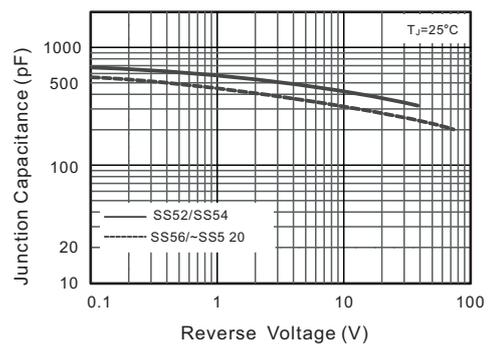


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

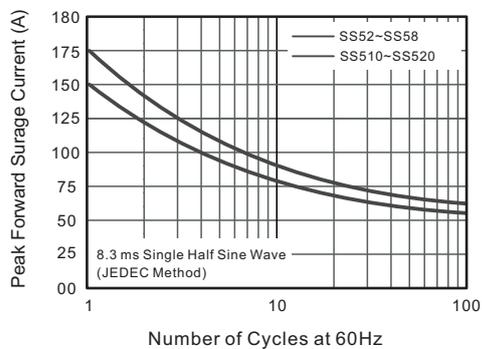
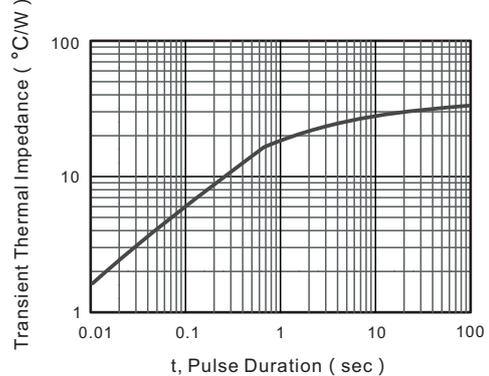


Fig.6 Typical Transient Thermal Impedance

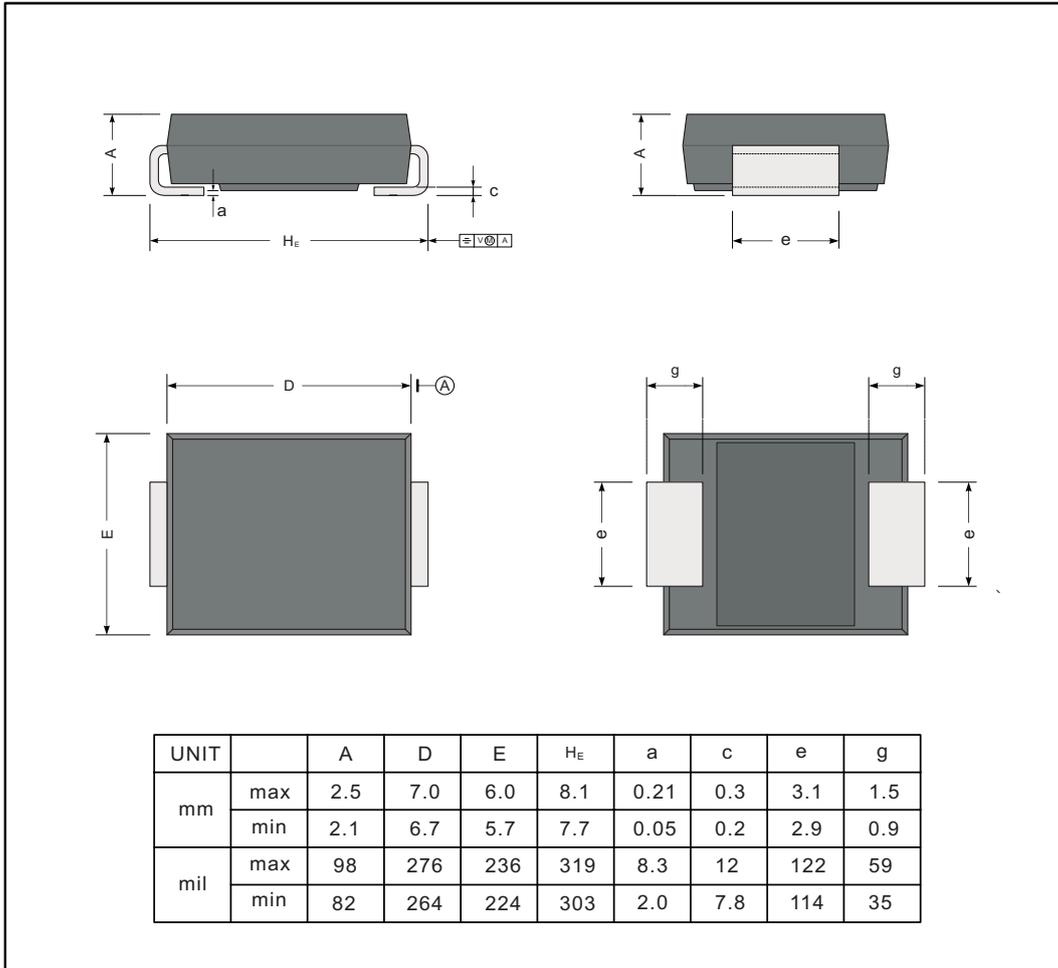
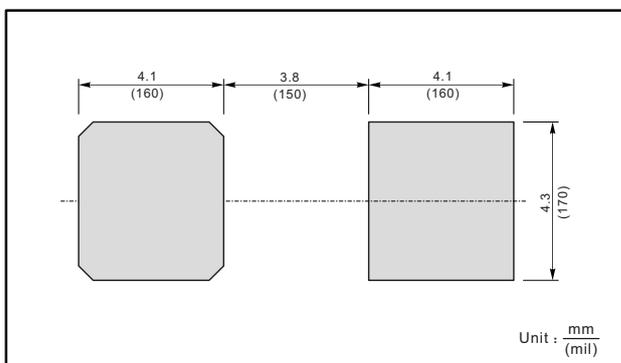


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PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SMC


The recommended mounting pad size

Marking

Type number	Marking code
SS52	SK52
SS54	SS54
SS56	SS56
SS58	SS58
SS510	SS510
SS512	SS512
SS515	SS515
SS520	SS520

Disclaimer

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