

# SS52 THUR SS520

## SS52 THUR SS520 Schottky Barrier Rectifiers

### General description

5.0Amp Surface Mounted Schottky Barrier Rectifiers

### FEATURES

- Flammability Classification 94V-O
- 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

### SMA/DO214AC

#### PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



### Maximum Ratings And Electrical Characteristics

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	V <sub>DC</sub>	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	120								A
Max Instantaneous Forward Voltage at 5 A	V <sub>F</sub>	0.55		0.70			0.85			V
Maximum DC Reverse Current T <sub>a</sub> = 25°C at Rated DC Reverse Voltage T <sub>a</sub> = 100°C	I <sub>R</sub>					1.0				mA
						50				
Typical Junction Capacitance <sup>(1)</sup>	C <sub>j</sub>	500					300			pF
Typical Thermal Resistance <sup>(2)</sup>	R <sub>θJA</sub>					60				°C/W
Operating Junction Temperature Range	T <sub>j</sub>					-55 ~ +150				°C
Storage Temperature Range	T <sub>stg</sub>					-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

Fig.1 Forward Current Derating Curve

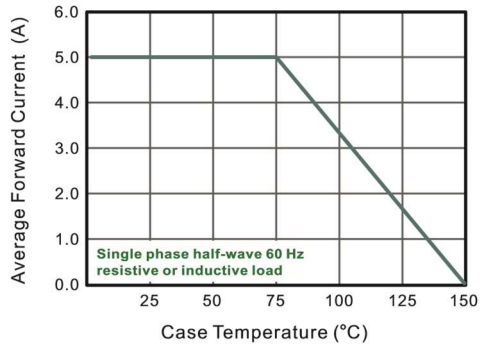


Fig.2 Typical Reverse Characteristics

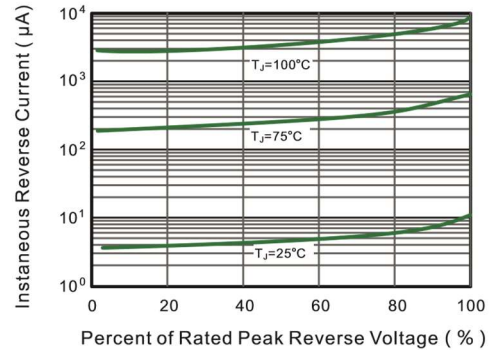


Fig.3 Typical Forward Characteristic

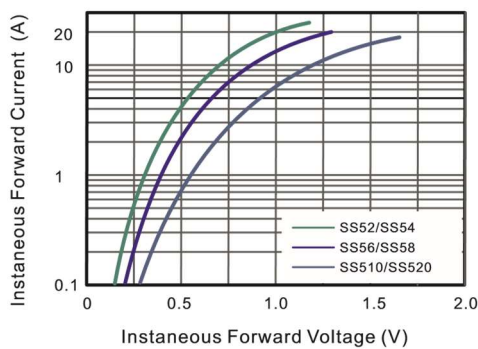


Fig.4 Typical Junction Capacitance

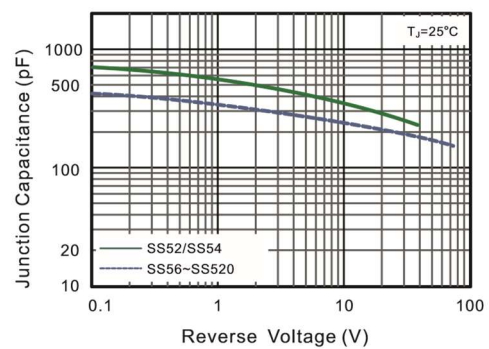


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

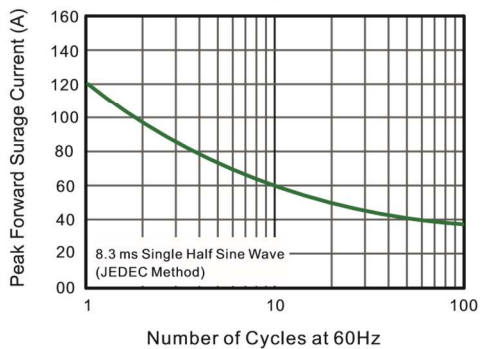
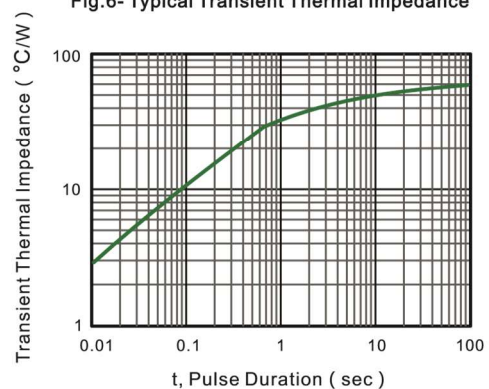
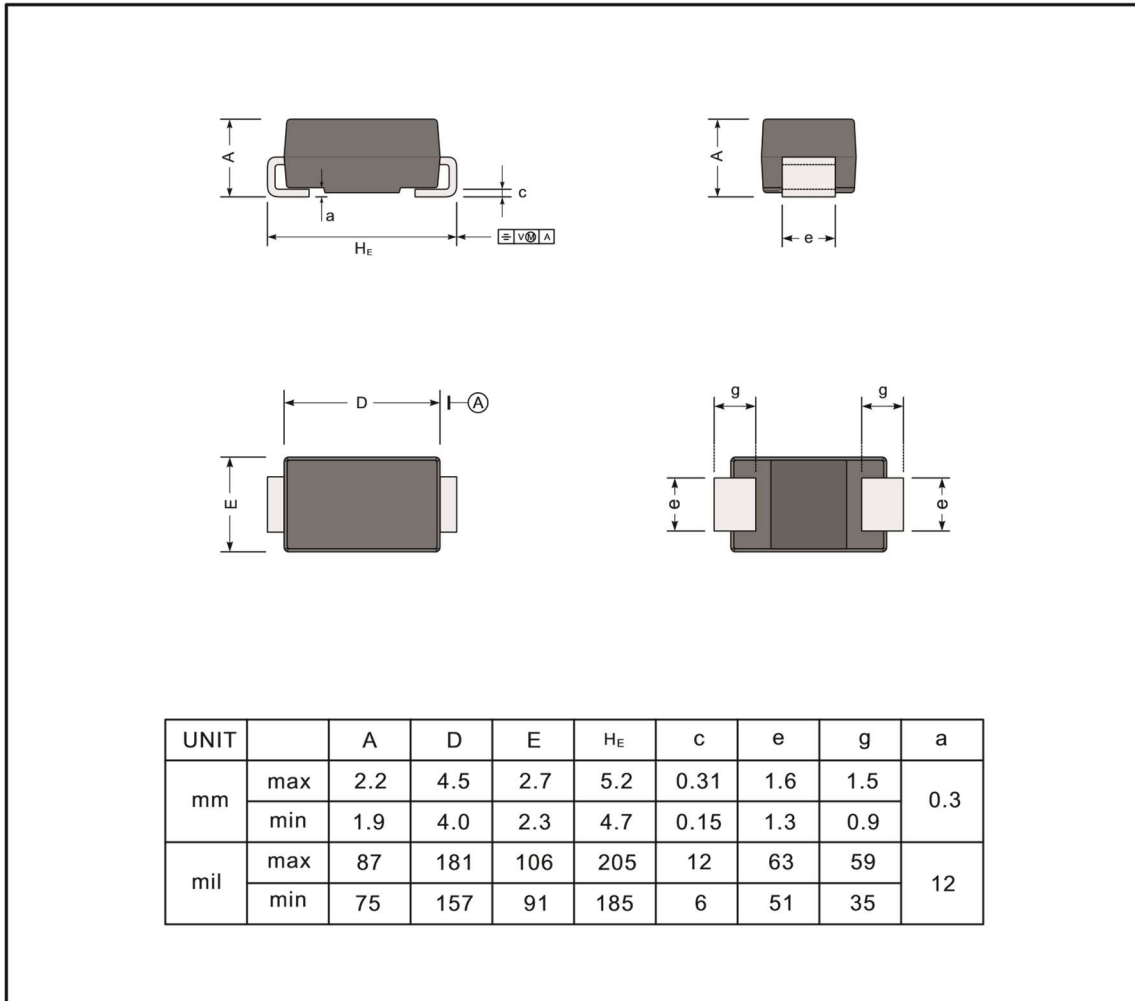


Fig.6- Typical Transient Thermal Impedance

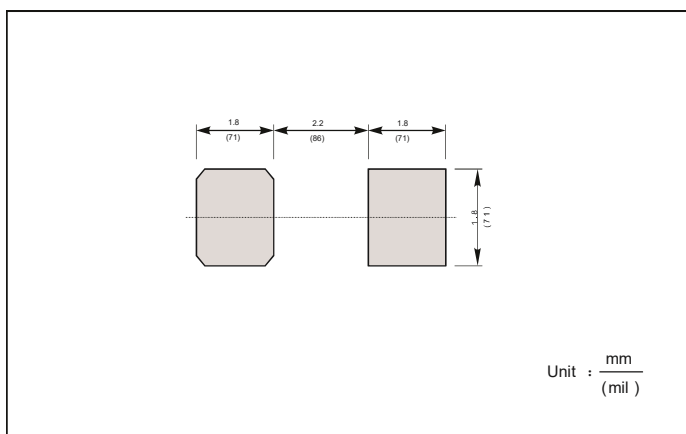


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## PACKAGE OUTLINE



## The recommended mounting pad size



Type number	Marking code
SS52_	SS52
SS54	SS54
SS56	SS56
SS58	SS58
SS510	SS510
SS512	SS512
SS515	SS515
SS520	SS520

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