

SS52A THRU SS520A

Surface Mount Schottky Barrier Rectifier

Reverse Voltage - 20 to 200 V

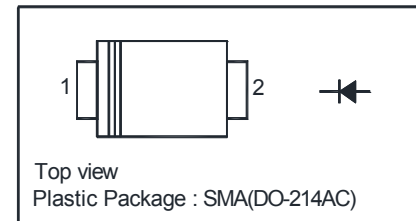
Forward Current - 5 A

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:** SMA (DO-214AC) molded plastic body
- **Polarity:** Color band denotes cathode end
- **Mounting Position:** Any

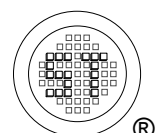
Maximum Ratings and Electrical Characteristics

Ratings at $T_a = 25^\circ\text{C}$ ambient temperature unless otherwise specified. Single phase, half wave 60 Hz, resistive or inductive load, For capacitive load current derate by 20 % .

Parameter	Symbol	SS52A	SS53A	SS54A	SS55A	SS56A	SS58A	SS510A	SS515A	SS520A	Unit
	Maring	SS52A	SS53A	SS54A	SS55A	SS56A	SS58A	SS510A	SS515A	SS520A	-
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	20	30	40	50	60	80	100	150	200	V
Maximum RMS Voltage	V _{RMS}	14	21	28	35	42	56	70	105	140	V
Maximum DC Blocking Voltage	V _{DC}	20	30	40	50	60	80	100	150	200	V
Maximum Average Forward Rectified Current	I _{F(AV)}	5									A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load (JEDEC Method)	I _{FSM}	150									A
Maximum Instantaneous Forward Voltage at 5 A	V _F	0.55			0.75		0.85		0.9		V
Maximum DC Reverse Current at Rated DC Blocking Voltage T _a = 25°C T _a = 100°C	I _R	0.5						0.3		mA	
		50				20		5			
Typical Junction Capacitance ¹⁾	C _J	500			300						pF
Typical Thermal Resistance ²⁾	R _{θJA}	60									°C/W
Operating Junction Temperature Range	T _j	- 55 to + 150									°C
Storage Temperature Range	T _{stg}	- 55 to + 150									°C

¹⁾ Measured at 1 MHz and applied reverse voltage of 4.0 V D.C .

²⁾ P.C.B mounted with 2" X 2" (5 X 5 cm) copper pad areas .



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Electrical characteristic curves

Fig.1 Forward Current Derating Curve

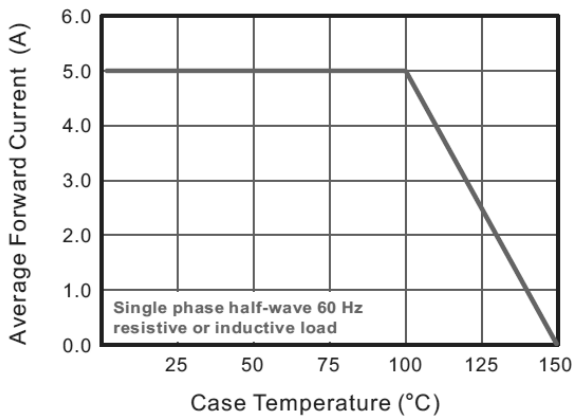


Fig.2 Typical Reverse Characteristics

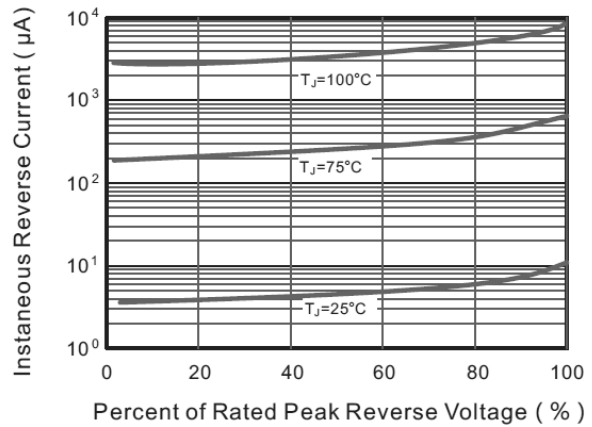


Fig.3 Typical Forward Characteristic

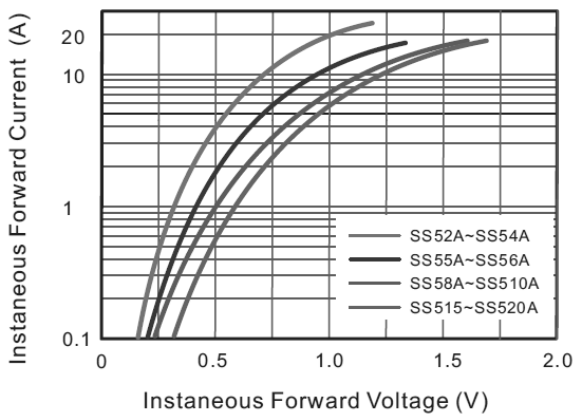


Fig.4 Typical Junction Capacitance

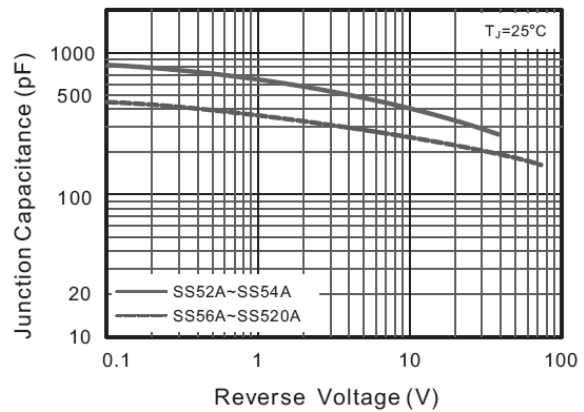


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

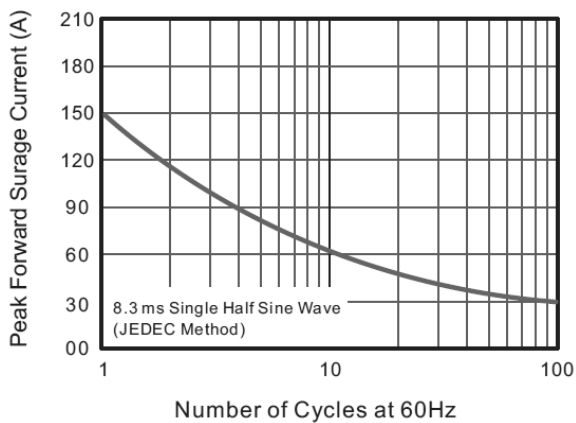
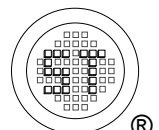
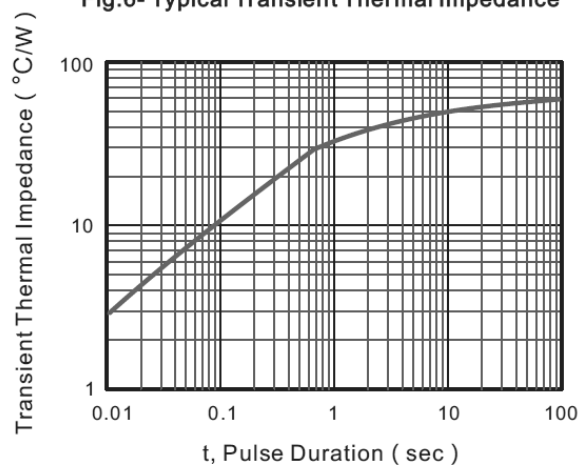


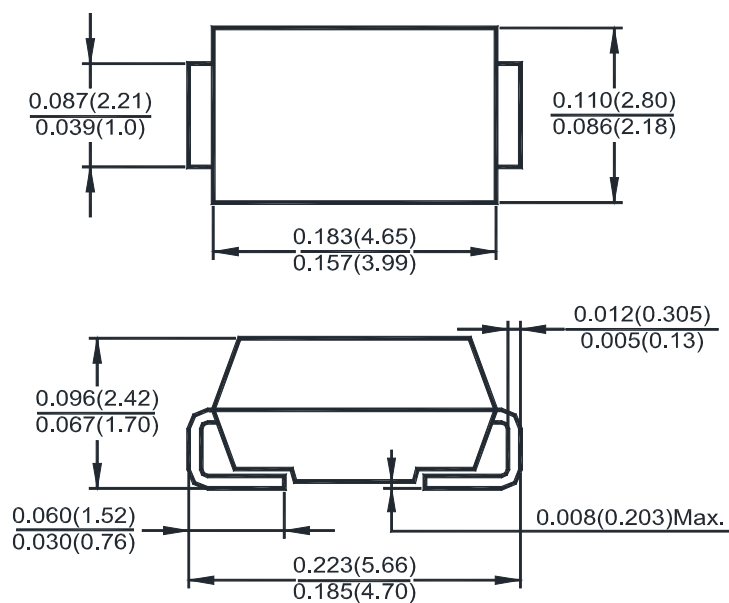
Fig.6- Typical Transient Thermal Impedance



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Package Outline Dimensions in inches (millimeters)

SMA(DO-214AC)



Marking information

" ***** " = Part No.

" III " = Cathode line

Font type: Arial

