

SS32 THRU SS3A

Schottky Barrier Rectifiers

Reverse Voltage - 20 to 100 V

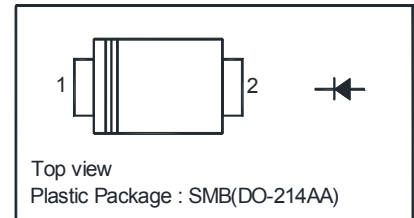
Forward Current - 3 A

Features

- Plastic package has Underwriters Laboratories Flammability Classification 94V-0
- Metal silicon junction, majority carrier conduction
- For surface mount applications
- Low power loss, high efficiency
- High current capability, low forward voltage drop.
- Low profile package
- Built-in strain relief, ideal for automated placement
- For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



Mechanical Data

- **Case:** SMB (DO-214AA), molded plastic body
- **Terminals:** Solder plated, solderable per MIL-STD-750, method 2026
- **Polarity:** Color band denotes cathode end

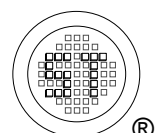
Absolute Maximum Ratings and Characteristics

Ratings at 25 °C ambient temperature unless otherwise specified. Single phase, half wave, resistive or inductive load. For capacitive load, derate by 20 %.

Parameter	Symbols	SS32	SS33	SS34	SS35	SS36	SS38	SS3A	Units
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	20	30	40	50	60	80	100	V
Maximum RMS Voltage	V _{RMS}	14	21	28	35	42	57	71	V
Maximum DC Blocking Voltage	V _{DC}	20	30	40	50	60	80	100	V
Maximum Average Forward Rectified Current at 0.375"(9.5 mm) Lead Length	I _{F(AV)}	3							A
Peak Forward Surge Current 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC Method)	I _{FSM}	80							A
Maximum Instantaneous Forward Voltage at 3 A	V _F	0.55			0.75		0.85		V
Maximum Reverse Current at Rated DC Blocking at Voltage T _a = 25°C T _a = 100°C	I _R	1.5							mA
		20			10				
Typical Junction Capacitance ¹⁾	C _j	250			160				pF
Typical Thermal Resistance ²⁾	R _{θJA}	68							°C/W
Operating Junction Temperature Range	T _j	- 55 to + 125			- 55 to + 150				°C
Storage Temperature Range	T _{stg}	- 55 to + 150							°C

¹⁾ Measured at 1 MHz and reverse voltage of 4 V

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



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Electrical characteristic curves

Fig.1 Forward Current Derating Curve

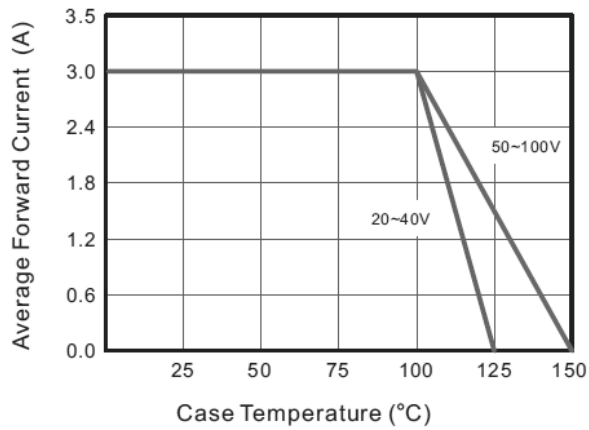


Fig.2 Typical Reverse Characteristics

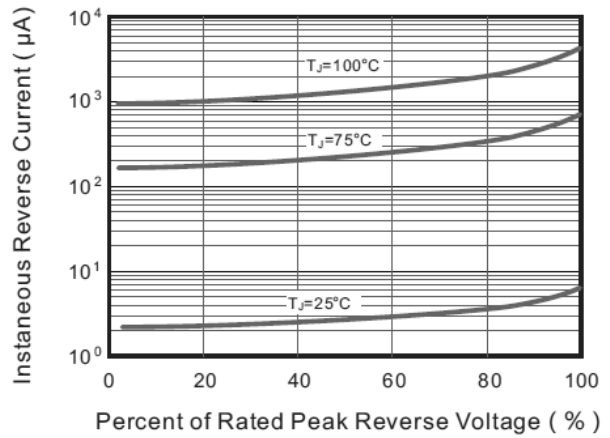


Fig.3 Typical Forward Characteristic

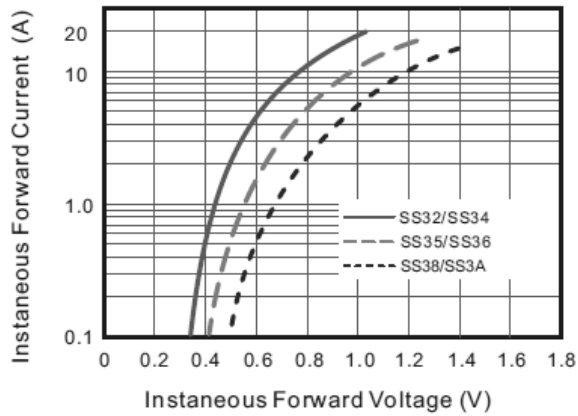


Fig.4 Typical Junction Capacitance

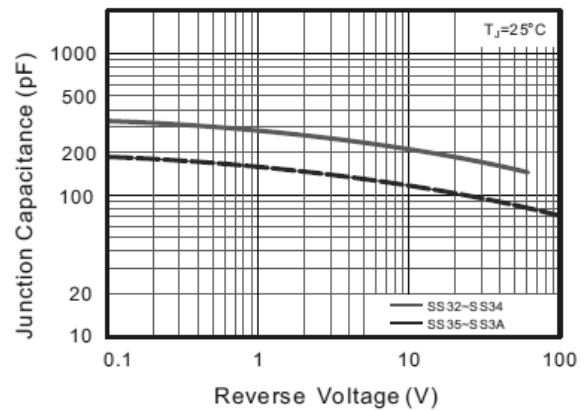


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

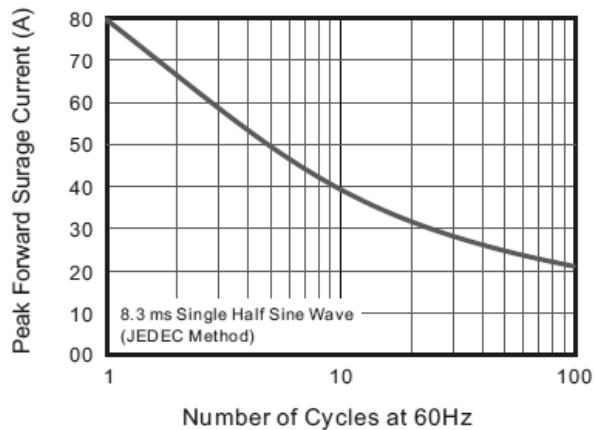
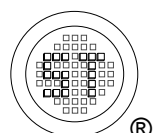
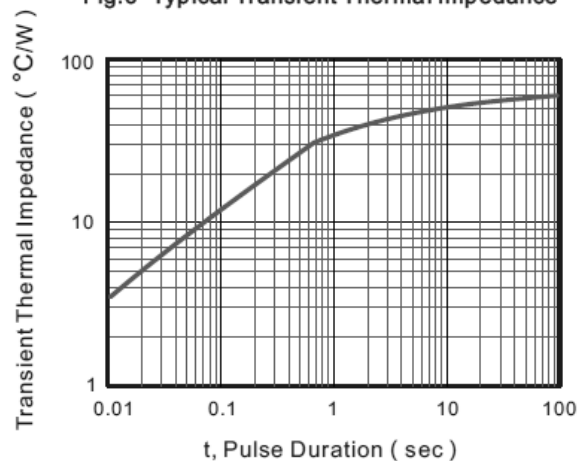


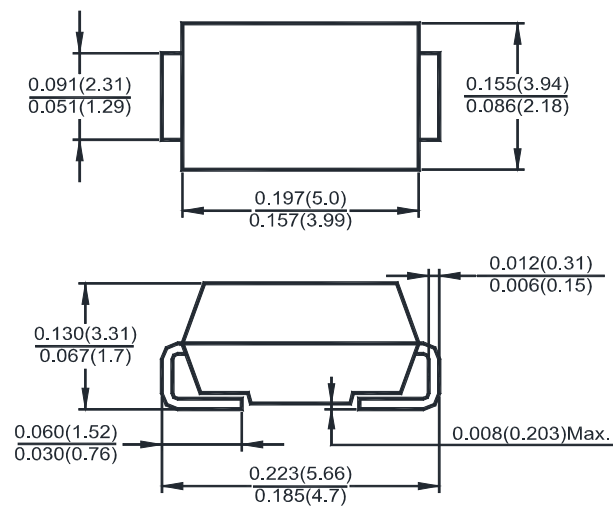
Fig.6 Typical Transient Thermal Impedance



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Package Outline Dimensions in inches (millimeters)

SMB(DO-214AA)



Marking information

" **** " = Part No.

" III " = Cathode line

Font type: Arial

