

S2A THRU S2M

Surface Mount General Rectifiers

Reverse Voltage - 50 to 1000 V

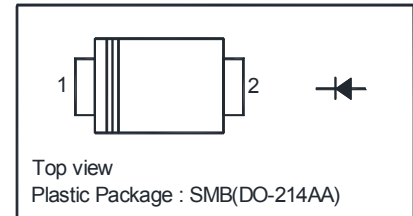
Forward Current - 2 A

Features

- The plastic package carries UL flammability classification 94V-0
- High forward surge current capability
- Low reverse current

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
- **Mounting position:** Any

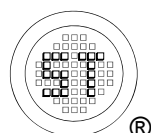
Maximum Ratings and Characteristics

Ratings at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Parameter	Symbols	S2A	S2B	S2D	S2G	S2J	S2K	S2M	Unit
	Marking	S2A	S2B	S2D	S2G	S2J	S2K	S2M	-
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Current	$I_{F(AV)}$	2							A
Peak Forward Surge Current 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	60							A
Maximum Forward Voltage at $I_F = 2$ A	V_F	1.1							V
Maximum DC Reverse Current $T_a = 25^\circ\text{C}$ at Rated DC Blocking Voltage $T_a = 125^\circ\text{C}$	I_R	5 100							μA
Typical Junction Capacitance ¹⁾	C_J	25							pF
Typical Thermal Resistance ²⁾	$R_{\theta JA}$ $R_{\theta JC}$	60 20							$^\circ\text{C/W}$
Operating and Storage Temperature Range	T_j, T_{stg}	- 55 to + 150							$^\circ\text{C}$

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

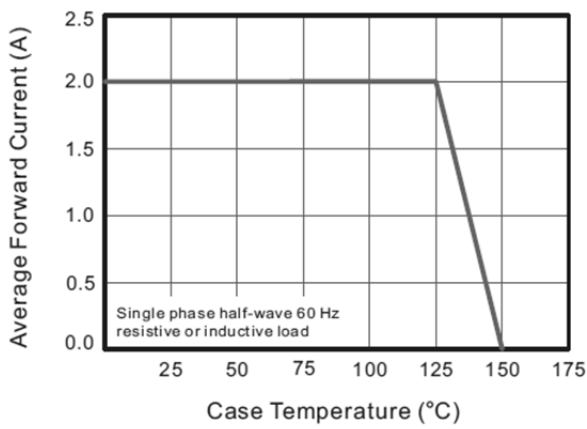


Fig.2 Typical Instantaneous Reverse Characteristics

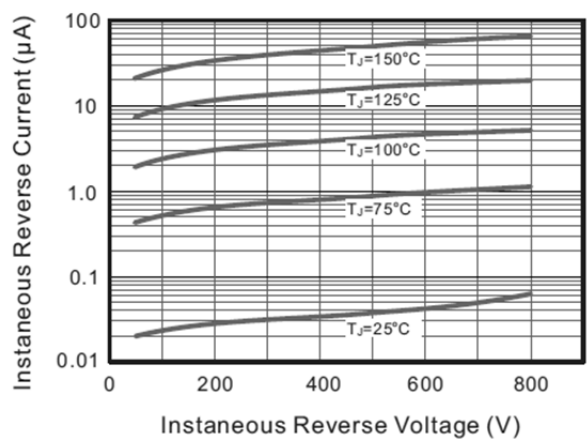


Fig.3 Typical Forward Characteristic

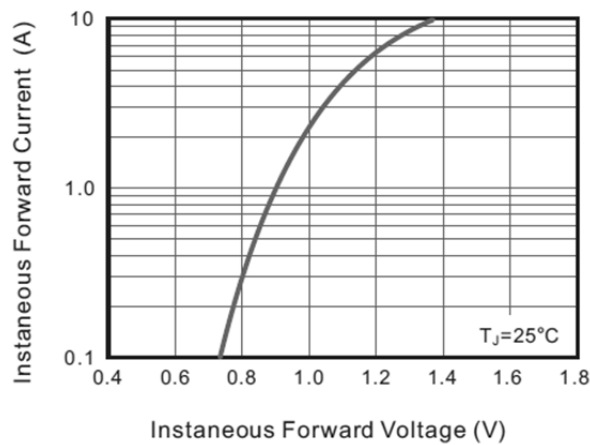


Fig.4 Typical Junction Capacitance

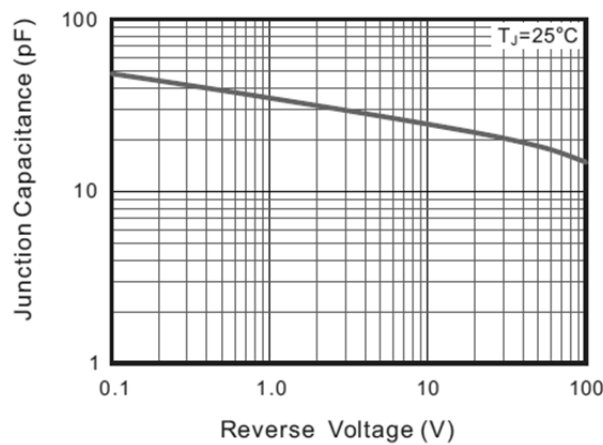
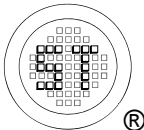
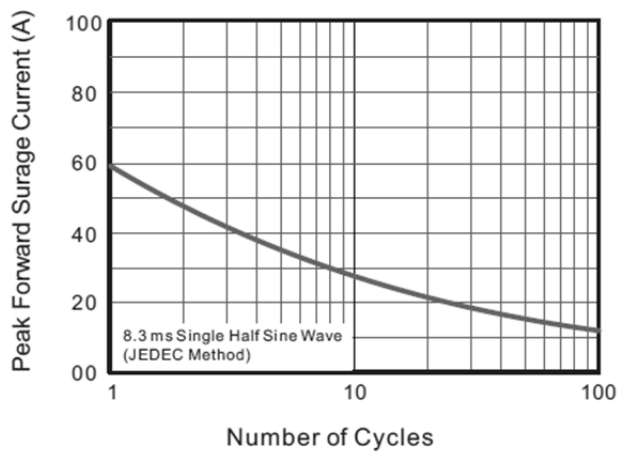


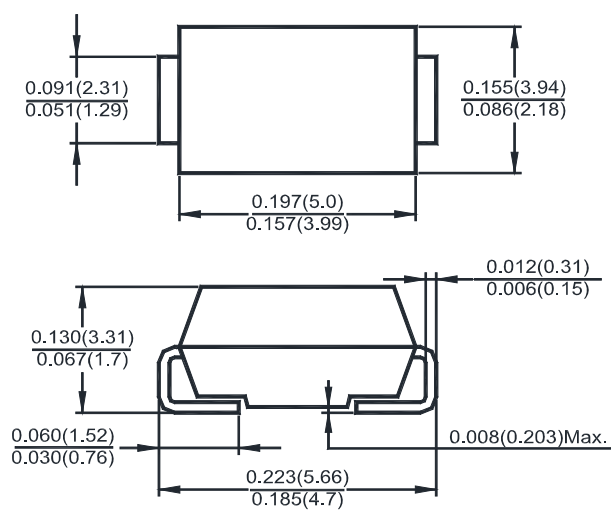
Fig.5 Maximum Non-Repetitive Peak Forward Surge Current



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Package Outline Dimensions in inches (millimeters)

SMB(DO-214AA)



Marking information

" *** " = Part No.

" III " = Cathode line

Font type: Arial

