

S2AD THRU S2MD

Surface Mount General Rectifiers

Reverse Voltage - 50 to 1000 V

Forward Current - 2 A

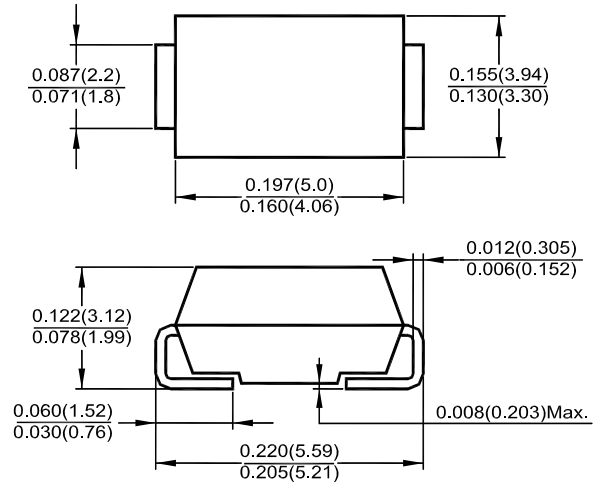
Features

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

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

SMB (DO-214AA)



Dimensions in inches and (millimeters)

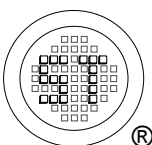
Maximum Ratings and Characteristics

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	S2AD	S2BD	S2DD	S2GD	S2JD	S2KD	S2MD	Units
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 at $T_L = 110\text{ }^\circ\text{C}$	$I_{F(AV)}$	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 $I_F = 2\text{ A}$	V_F	1.1							V
Maximum DC Reverse Current at $T_a = 25\text{ }^\circ\text{C}$ at Rated DC Blocking Voltage at $T_a = 100\text{ }^\circ\text{C}$	I_R	5 50							μA
Typical Junction Capacitance ¹⁾	C_j	30							pF
Typical Thermal Resistance ²⁾	$R_{\theta JA}$	50							$^\circ\text{C/W}$
Operating and Storage Temperature Range	T_j, T_{stg}	- 65 to + 175							$^\circ\text{C}$

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

²⁾ P.C.B mounted with 0.2 X 0.2" (5 X 5 mm) copper pad areas

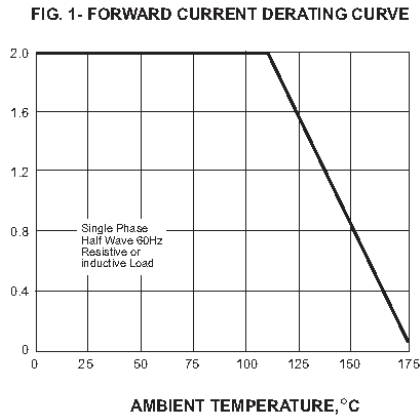


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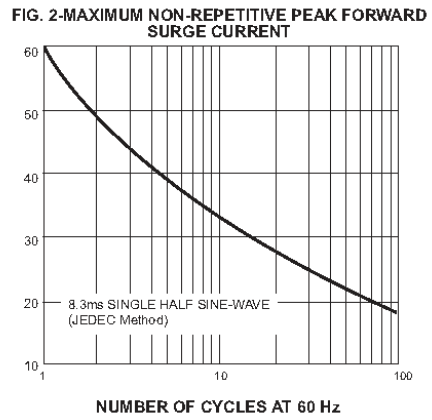


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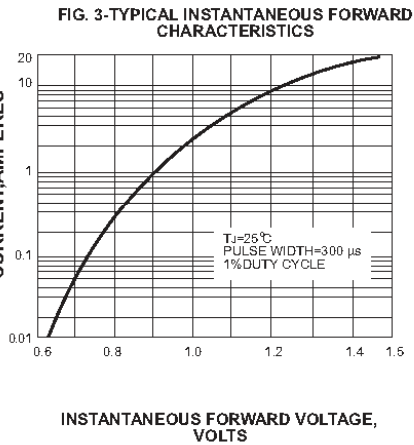
AVERAGE FORWARD RECTIFIED CURRENT, AMPERES



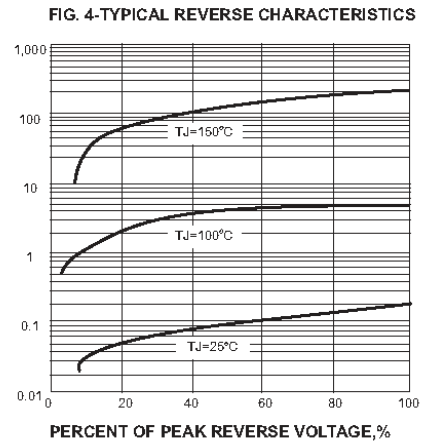
PEAK FORWARD SURGE CURRENT, AMPERES



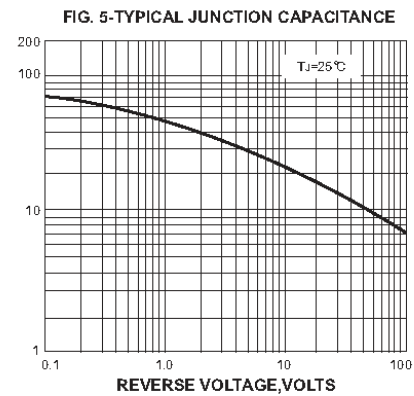
INSTANTANEOUS FORWARD CURRENT, AMPERES



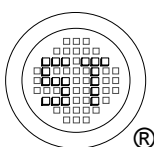
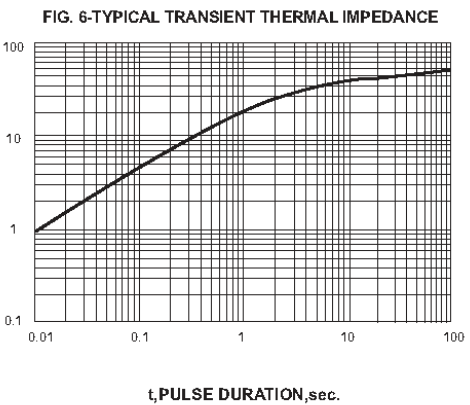
INSTANTANEOUS REVERSE CURRENT, MICROAMPERES



JUNCTION CAPACITANCE, pF



TRANSIENT THERMAL IMPEDANCE, °C/W



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