

# S3AD THRU S3MD

## Surface Mount General Rectifiers

Reverse Voltage - 50 to 1000 V

Forward Current - 3 A

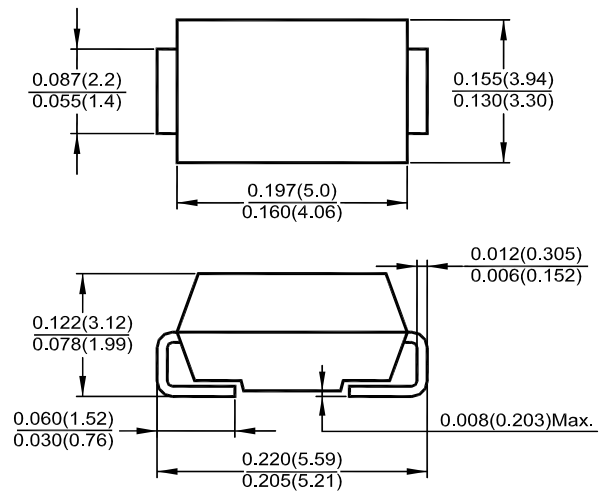
### Features

- 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)

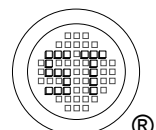
### Maximum Ratings and Characteristics

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	S3AD	S3BD	S3DD	S3GD	S3JD	S3KD	S3MD	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 $T_L = 110^\circ\text{C}$	$I_{F(AV)}$	3							A
Peak Forward Surge Current 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC Method)	$I_{FSM}$	100							A
Maximum Forward Voltage at $I_F = 3\text{ A}$	$V_F$	1.1							V
Maximum DC Reverse Current at $T_a = 25^\circ\text{C}$ at Rated DC Blocking Voltage at $T_a = 100^\circ\text{C}$	$I_R$	5 100							$\mu\text{A}$
Typical Junction Capacitance <sup>1)</sup>	$C_j$	60							pF
Typical Thermal Resistance <sup>2)</sup>	$R_{\theta JA}$	50							$^\circ\text{C/W}$
Operating and Storage Temperature Range	$T_j, T_{stg}$	- 65 to + 175							$^\circ\text{C}$

<sup>1)</sup> Measured at 1 MHz and applied reverse voltage of 4 V.

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



# S3AD THRU S3MD

