# S5A THRU S5M

### Surface Mount General Rectifiers Reverse Voltage - 50 to 1000 V Forward Current - 5 A

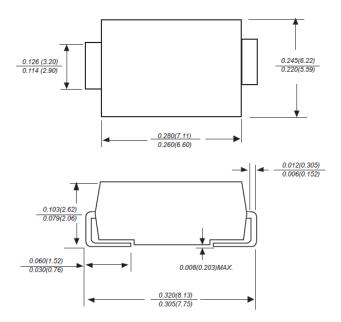
SMC (DO-214AB)

## Features

- The plastic package carries Underwrites Laboratory flammability classification 94V-0
- For surface mounted applications
- Low reverse leakage
- Built-in strain relief, ideal for automated placement
- High forward surge current capability

#### Mechanical Data

- Case: JEDEC DO-214AB molded plastic body
- **Terminals:** Plated axial leads, solderable per MIL-STD-750, Method 2026
- Polarity: Color band denotes cathode end
- Mounting position: Any



Dimensions in inches and (millimeters)

#### **Maximum Ratings and Electrical Characteristics**

Ratings at 25 °C ambient temperature unless otherwise specified.

Single phase half-wave 60 Hz, resistive or inductive load, for capacitive load current derate by 20 %.

Parameter	Symbols	S5A	S5B	S5D	S5G	S5J	S5K	S5M	Units
	Marking	S5A	S5B	S5D	S5G	S5J	S5K	S5M	-
Maximum Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V <sub>RMS</sub>	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	$V_{\text{DC}}$	50	100	200	400	600	800	1000	V
Maximum Average Forward Current at T_L = 110 $^\circ \text{C}$	I <sub>F(AV)</sub>	5							А
Peak Forward Surge Current 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC Method)	I <sub>FSM</sub>	150							А
Maximum Forward Voltage at $I_F$ = 5 A	$V_{F}$	1							V
Maximum DC Reverse Currentat $T_a = 25 \ ^{\circ}C$ at Rated DC Blocking Voltageat $T_a = 100 \ ^{\circ}C$	I <sub>R</sub>	5 100							μA
Typical Junction Capacitance <sup>1)</sup>	Cj	120							pF
Typical Thermal Resistance 2)	$R_{ extsf{ heta}JA}$	80							°C/W
Operating and Storage Temperature Range	T <sub>j</sub> , T <sub>stg</sub>	- 65 to + 150							°C

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

 $^{2)}$  P.C.B mounted with 0.4 X 0.4" (10 X 10 mm) copper pad areas



