







Features

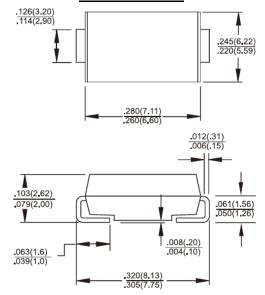
- For surface mounted application
- Glass passivated junction chip.
- Low forward voltage drop
- High current capability
- Easy pick and place
- High surge current capability
- Plastic material used carries Underwriters Laboratory Classification 94V-0
- High temperature soldering: 260° C/10 seconds at terminals
- Green compound with suffix "G" on packing code & prefix "G" on datecode.

Mechanical Data

- Case: Molded plastic
- Terminals: Pure tin plated, lead free.
- ♦ Polarity: Indicated by cathode band
- ♦ Packaging: 16mm tape per EIA STD RS-481
- Weight: 0.21 grams

5.0 AMPS. Surface Mount Rectifiers

SMC/DO-214AB



Dimensions in inches and (millimeters)

Marking Diagram



= Specific Device Code

= Green Compound

Υ = Year

= Work Month Μ

Maximum Ratings and Electrical Characteristics

Rating 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%

Type Number	Symbol	S5A	S5B	S5D	S5G	S5J	S5K	S5M	Units
Maximum Recurrent 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 Rectified Current	I _{F(AV)}	5						Α	
Peak Forward Surge Current, 8.3 ms Single Half Sinewave Superimposed on Rated Load (JEDEC method)	I _{FSM}	100							Α
Maximum Instantaneous Forward Voltage (Note 1) @ 5 A	V _F	1.15						V	
Maximum DC Reverse Current @ T_A =25 $^{\circ}$ C at Rated DC Blocking Voltage @ T_A =125 $^{\circ}$ C	I _R	10 250						uA uA	
Typical Reverse Recovery Time (Note 2)	Trr	1.5						uS	
Typical Junction Capacitance (Note 3)	Cj	60						pF	
Typical Thermal Resistance	$R_{ heta JA}$	13 47						°C/W	
Operating Temperature Range	TJ	- 55 to + 150							οС
Storage Temperature Range	T _{STG}	- 55 to + 150						οС	

Notes: 1. Pulse Test with PW=300 usec, 1% Duty Cycle

- 2. Reverse Recovery Test Conditions: I F=0.5A, IR=1.0A, IRR=0.25A
- 3. Measured at 1 MHz and Applied VR=4.0 Volts



RATINGS AND CHARACTERISTIC CURVES (S5A THRU S5M)

