







Features

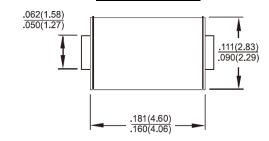
- For surface mounted application
- Glass passivated chip junction
- Low forward voltage drop
- High current capability
- Easy pick and place
- High surge current capability
- Plastic material used carries Underwriters Laboratory Classification 94V-0
- High temperature soldering: 260° C/10 seconds at terminals
- Qualified as per AEC-Q101
- Green compound with suffix "G" on packing code & prefix "G" on datecode

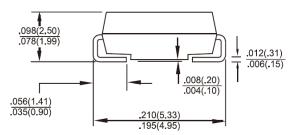
Mechanical Data

- Case: Molded plastic
- Terminal: Pure tin plated, lead free solderable per J-STD-002B and JESD22-B102D
- Polarity: Indicated by cathode band
- Packing: 12mm tape per EIA STD RS-481
- Weight: 0.064 grams

1.0AMP Surface Mount Rectifiers

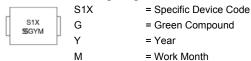
SMA/DO-214AC





Dimensions in inches and (millimeters)

Marking Diagram



Maximum Ratings and Electrical Characteristics

Rating at 25 $^{\circ}\!\mathbb{C}$ 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	S1A	S1B	S1D	S1G	S1J	S1K	S1M	Unit
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 Rectified Current	$I_{F(AV)}$	1							Α
Peak Forward Surge Current, 8.3 ms Single Half Sinewave Superimposed on Rated Load (JEDEC method)	I _{FSM}	40 30						30	Α
Maximum Instantaneous Forward Voltage (Note 1) @ 1 A	V _F	1.1							V
Maximum Reverse Current @ Rated VR T_A =25 $^{\circ}$ C T_A =125 $^{\circ}$ C	I _R	1 50							uA
Maximum Reverse Recovery Time (Note 2)	Trr	1.5							uS
Typical Junction Capacitance (Note 3)	Cj	12							pF
Non-Repetitive Peak Reverse Avalanche Engergy at 25°C, I _{AS} =1A, L=10mH	E _{RSM}	5							mJ
Typical Thermal Resistance	R _{θjA} R _{θjL}	75 27			_	35 30	°C/W		
Operating Temperature Range	T _J	- 55 to + 175							οС
Storage Temperature Range	T _{STG}	- 55 to + 175							οС

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

Note 2: Reverse Recovery Test Conditions: I_F =0.5A, I_R =1.0A, I_{RR} =0.25A

Note 3: Measured at 1 MHz and Applied Reverse Voltage of 4.0V D.C.



RATINGS AND CHARACTERISTIC CURVES (S1A THRU S1M)

