

GS1AD THRU GS1MD

SURFACE MOUNT GENERAL RECTIFIER

Reverse Voltage – 50 to 1000 V

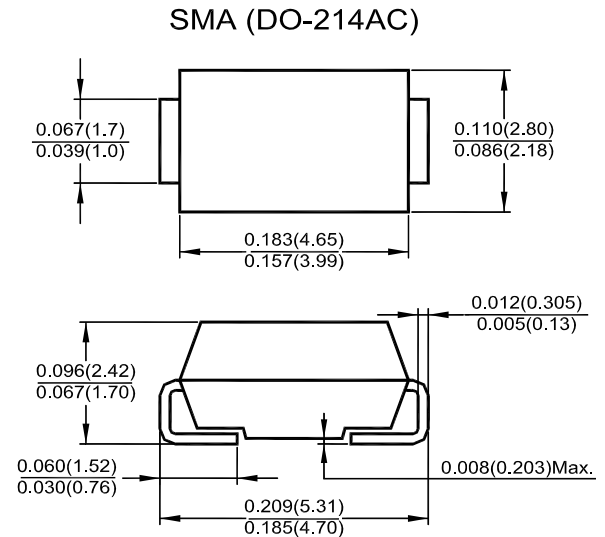
Forward Current – 1 A

Features

- For surface mounted applications
- Low reverse leakage
- Built-in strain relief, ideal for automated placement
- High forward surge current capability
- Plastic package has Underwriters Laboratory Flammability Classification 94V-0

Mechanical Data

- **Case:** SMA (DO-214AC), molded plastic
- **Terminals:** Solder plated, solderable per MIL-STD-750 method 2026
- **Polarity:** Color band denotes cathode band
- **Mounting position:** Any



Dimensions in inches and (millimeters)

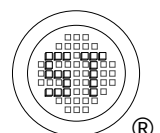
Absolute Maximum Ratings and Characteristics

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	GS1AD	GS1BD	GS1DD	GS1GD	GS1JD	GS1KD	GS1MD	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 at $T_L = 110\text{ }^{\circ}\text{C}$	$I_{F(AV)}$	1							A
Peak Forward Surge Current 8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	30							A
Maximum Instantaneous Forward Voltage at 1A	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	15							pF
Typical Thermal Resistance ²⁾	$R_{\theta JA}$	75							$^{\circ}\text{C/W}$
Operating and Storage Temperature Range	T_j, T_{stg}	- 65 to+ 175							$^{\circ}\text{C}$

¹⁾ Measured at 1 MHz and applied $V_R = 4\text{ V}$.

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



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