



STEIF POWER
TECHNOLOGY

SN1P20

Surface Mount Glass Passivated Standard Rectifier
Reverse Voltage 2000V Forward Current 1A

Features

- Ideal for automated placement
- Glass passivated standard rectifier
- High reverse voltage
- High forward surge capability
- Moisture sensitivity: level 1, per J-STD-02



DO-214AC(SMA)



Typical Applications

- For use of general purpose rectification in lighting, cellular phones, portable devices, power supplies and other consumer applications.

Mechanical Data

- Case:DO-214AC, molded epoxy body, Epoxy meets UL 94V-0 flammability rating
- Terminal:Matte tin plated leads, solderable per J-STD-002 and JESD22B-106
- Polarity:Indicated by cathode band

Maximum Ratings and Electrical Characteristics

(T_A = 25 °C unless otherwise noted)

Parameter	Symbol	Value	Unit
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	2000	V
Maximum RMS Voltage	V _{RMS}	1400	V
Maximum DC Blocking Voltage	V _{DC}	2000	V
Maximum Average Forward Rectified Current	I _{F(AV)}	1.0	A
Peak Forward Surge Current (8.3 ms single half sine-wave superimposed on rated load)	I _{FSM}	30.0	A
Maximum Forward Voltage @ I _F =1.0Amps	V _F	1.1	V
Maximum DC Reverse Current at Rated DC Blocking	I _R	5.0	uA
Typical Junction Capacitance(note1)	C _J	5.4	pF
Typical thermal resistance(note2)	R _{θJA}	10.0	°C/W
Operating Junction and Storage Temperature Range	T _J T _{STG}	- 55 to + 150	°C

Notes:1.Measured at 1.0MHz and applied reverse voltage of 4.0 D.C.

2.Thermal resistance from junction to ambient, 8.0×8.0mm copper pads to each terminal



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Ratings and Characteristics Curves

($T_A = 25^\circ\text{C}$ unless otherwise noted)

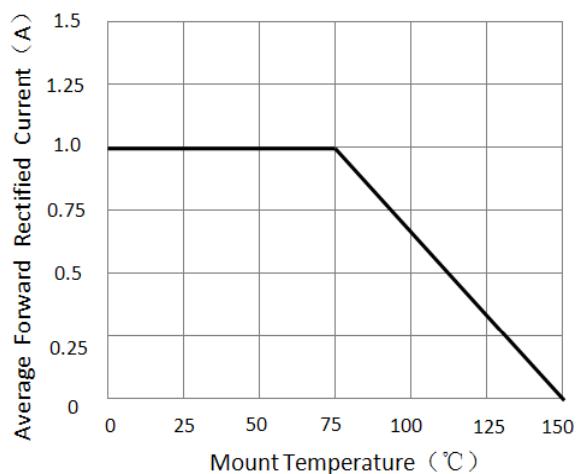


Figure 1. Forward Current Derating Curve

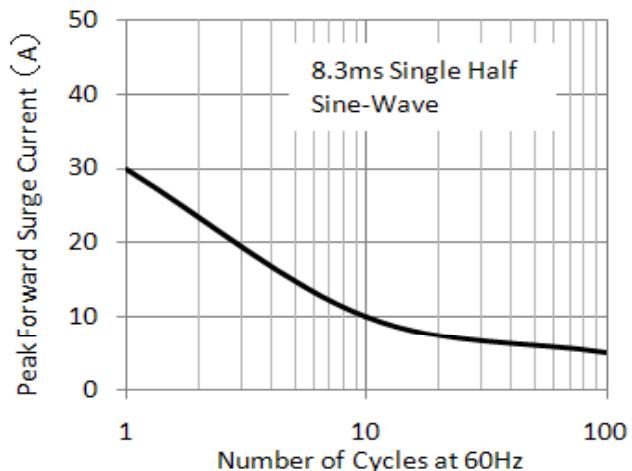


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current

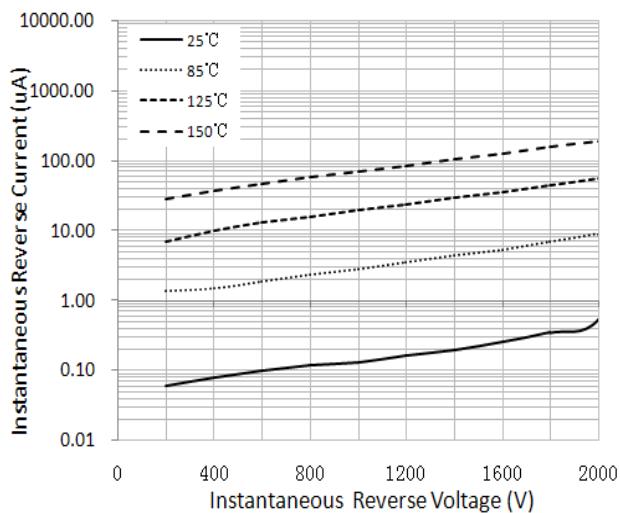


Figure 3. Typical Reverse Characteristics

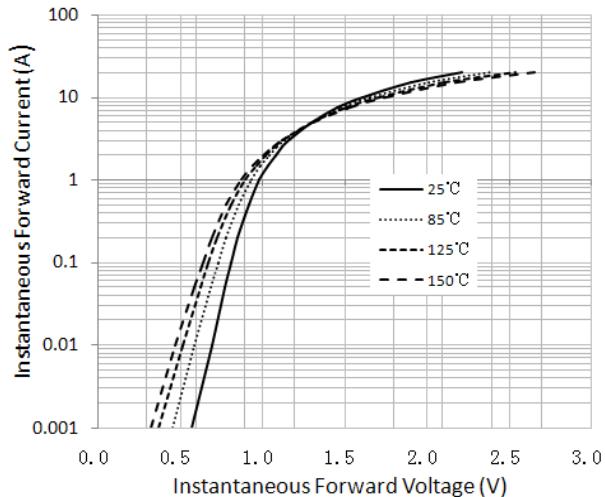


Figure 4. Typical Instantaneous Forward Characteristics

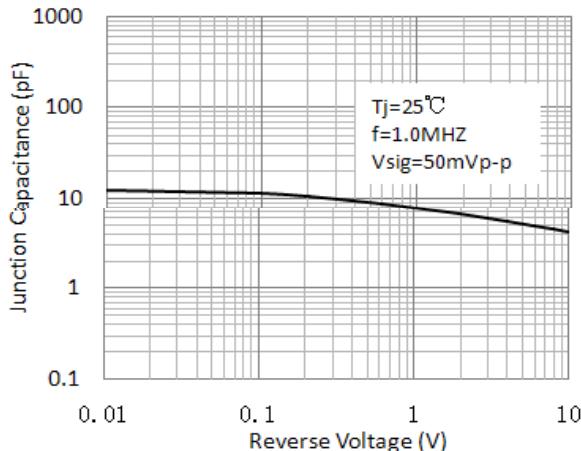


Figure 5. Typical Junction Capacitance



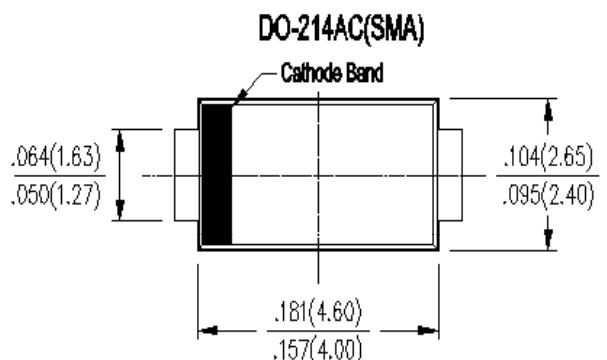
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Package Outline Dimensions

in inches (millimeters)



MOUNTING PAD LAYOUT

