



## FEATURES

- \* Ideal for surface mount applications
- \* Easy pick and place
- \* Built-in strain relief
- \* High surge current capability

## MECHANICAL DATA

- \* Case: Molded plastic
- \* Epoxy: UL 94V-0 rate flame retardant
- \* Terminals: Solder plated, solderable per MIL-STD-202F, method 208 guaranteed
- \* Polarity: Color band denotes cathode end
- \* Mounting position: Any
- \* Weight: 0.063 gram

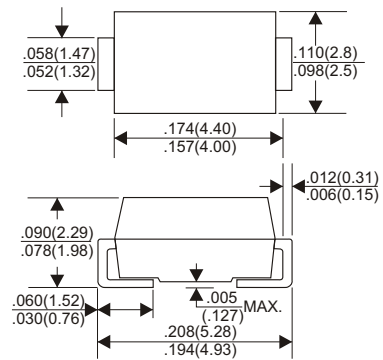
## VOLTAGE RANGE

2000 Volts

## CURRENT

1.5 Ampere

### DO-214AC(SMA)



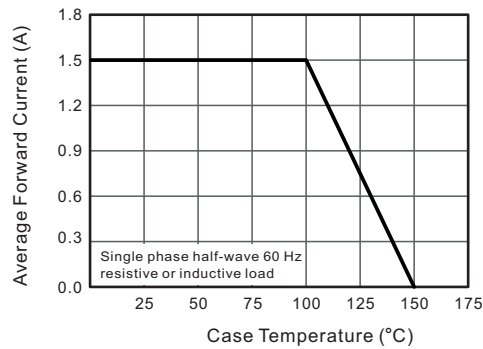
### ■ Absolute Maximum Ratings Ta = 25°C

Parameter	Symbols	SM520	Units
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	2000	V
Maximum Average Forward Rectified Current at $T_c = 100^\circ\text{C}$	$I_{F(AV)}$	1.5	A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load (JEDEC Method)	$I_{FSM}$	50	A
Maximum Instantaneous Forward Voltage at 1.5A	$V_F$	1.15	V
Maximum Reverse Current $T_J = 25^\circ\text{C}$ $T_J = 125^\circ\text{C}$	$I_R$	5 50	$\mu\text{A}$
Typical Junction Capacitance <sup>1)</sup>	$C_j$	20	pF
Typical Thermal Resistance <sup>2)</sup>	$R_{\theta JA}$	95	$^\circ\text{C/W}$
Operating and Storage Temperature Range	$T_J, T_{stg}$	-55 ~ +150	$^\circ\text{C}$

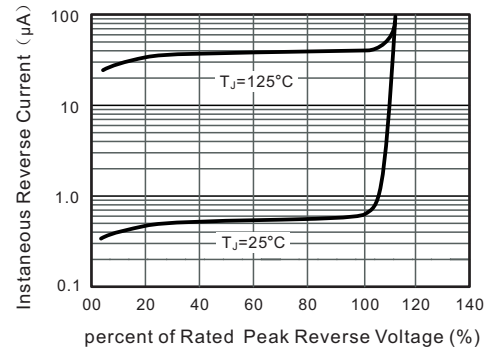
Measured at 1 MHz and applied reverse voltage of 4 V D.C  
P.C.B. mounted with 0.2 X 0.2" (5 X 5 mm) copper pad areas.

## RATING AND CHARACTERISTIC CURVES (SM520 )

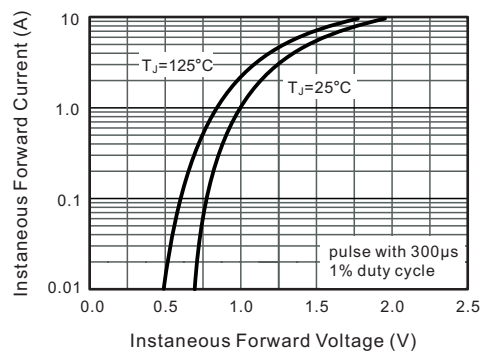
**Fig.1 Forward Current Derating Curve**



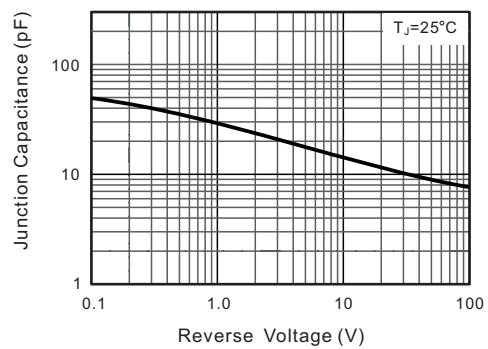
**Fig.2 Typical Reverse Characteristics**



**Fig.3 Typical Instantaneous Forward Characteristics**



**Fig.4 Typical Junction Capacitance**



**Fig.5 Maximum Non-Repetitive Peak Forward Surge Current**

