



Reverse Voltage :50 to 1000 Volts  
Forward Current :10.0 Ampere

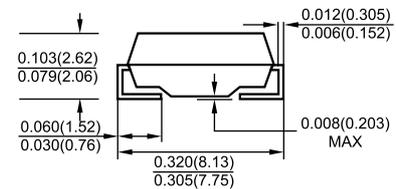
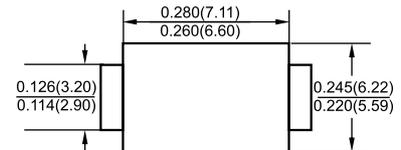
## Features

- ◆ The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- ◆ For surface mounted applications
- ◆ Low reverse leakage
- ◆ Built-in strain relief, ideal for automated placement
- ◆ High forward surge current capability
- ◆ High temperature soldering guaranteed:  
250 °C/10 seconds at terminals

## Mechanical Data

Case : JEDEC DO-214AB/SMC molded plastic body  
Terminals : Solderable per MIL-STD-750, Method 2026  
Polarity : Color band denotes cathode end  
Mounting Position : Any  
Weight : 0.0007 ounce, 0.25 grams

### DO-214AB/SMC



Dimensions in inches and (millimeters)

## Maximum Ratings And Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

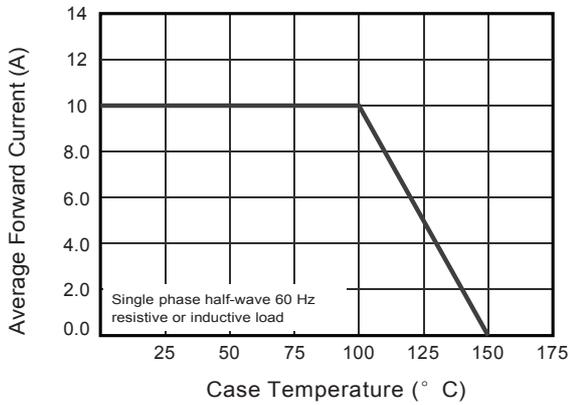
Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%.

Parameter	SYMBOLS	S10AC	S10BC	S10DC	S10GC	S10JC	S10KC	S10MC	UNITS
Maximum repetitive peak reverse voltage	$V_{RMM}$	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 $T_L=75^\circ\text{C}$	$I_{(AV)}$	10.0							A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	200							A
Maximum instantaneous forward voltage at 10.0A	$V_F$	1.1							V
Maximum DC reverse current at rated DC blocking voltage $T_A=25^\circ\text{C}$ $T_A=125^\circ\text{C}$	$I_R$	5 100.0							$\mu\text{A}$
Typical junction capacitance (NOTE 1)	$C_J$	100.0							pF
Typical thermal resistance (NOTE 2)	$R_{\theta JA}$	10.0							$^\circ\text{C}/\text{W}$
Operating junction and storage temperature range	$T_J, T_{STG}$	-55 to +150							$^\circ\text{C}$

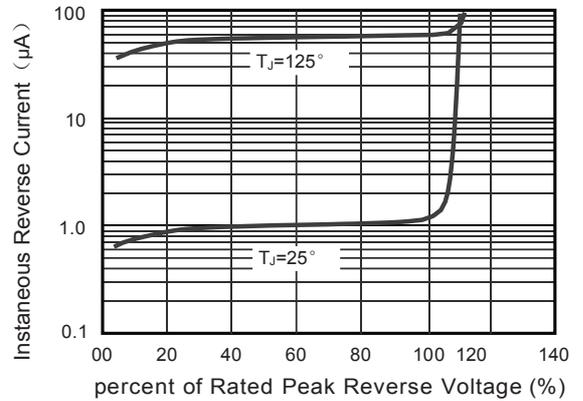
**Note:** 1. Measured at 1 MHz and applied reverse voltage of 4 V D.C  
 2. P.C.B. mounted with 2.0" X 2.0" (5 X 5 cm) copper pad areas.  
 3. The typical data above is for reference only.

## Ratings AND Characteristic Curves

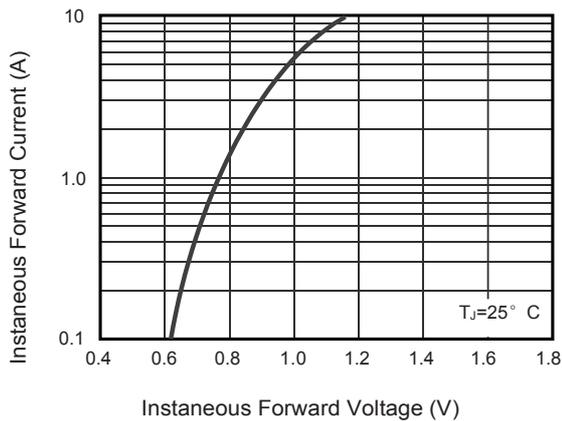
**Fig.1 Forward Current Derating Curve**



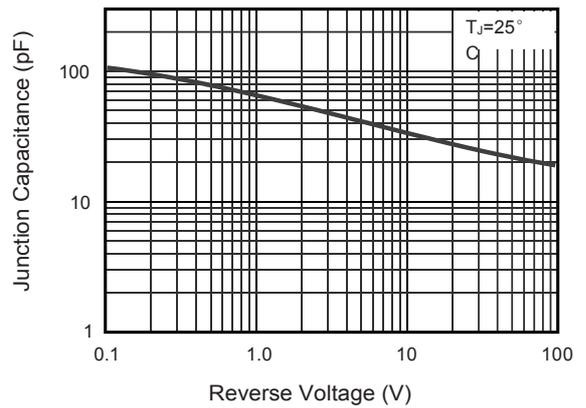
**Fig.2 Typical Reverse Characteristics**



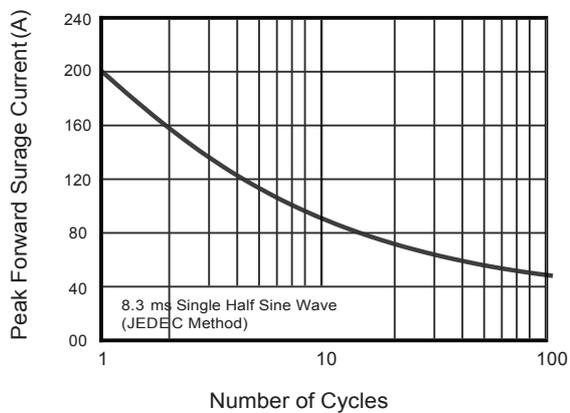
**Fig.3 Typical Forward Characteristic**



**Fig.4 Typical Junction Capacitance**



**Fig.6 Maximum Non-Repetitive Peak Forward Surge Current**



PACKAGE	SPQ/PCS	CARTON SPQ/PCS	CARTON SIZE/CM	CARTON GW/KG	CARTON NW/KG
SMC	3000/REEL	42000	36X36X36.5	18.50	15.50