

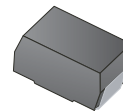
RoHS Compliant Product

A suffix of "-C" specifies halogen-free and RoHS Compliant

**SMC(DO-214AB)**

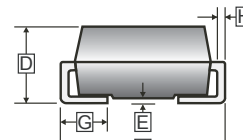
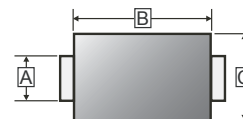
**FEATURES**

- Glass passivated junction
- High surge current capability
- Low reverse current
- Component in accordance to RoHS 2002/95/EC



**MECHANICAL DATA**

- Cases : SMC(DO-214AB)
- Case Material : Molded Plastic. UL Flammability Classification Rating 94V-0
- Terminals : Lead Free Plating(Tin Finish)  
Solderable Per MIL-STD-202, Method 208
- Polarity : Cathode Band
- Weight : 0.231 grams(approximate)



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	2.750	3.250	E	-	0.203
B	6.520	7.110	F	7.750	8.130
C	5.590	6.220	G	0.760	1.520
D	2.000	2.620	H	0.150	0.305

**PACKAGE INFORMATION**

Package	MPQ	Leader Size
SMC	3K	13 inch

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

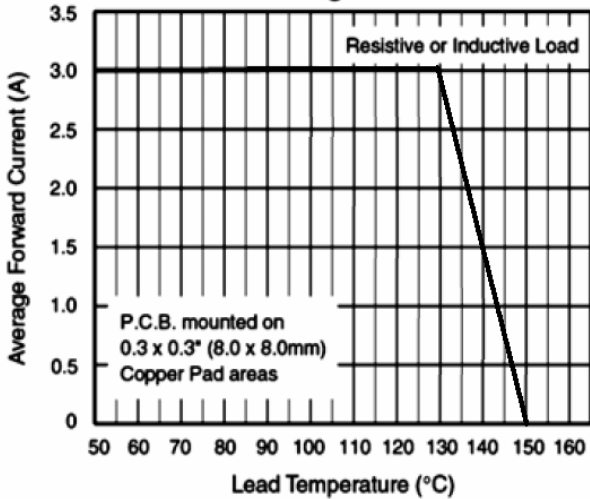
Parameters	Symbol	Part Number							Units
		QG 301C	QG 302C	QG 303C	QG 304C	QG 305C	QG 306C	QG 307C	
Maximum repetitive peak reverse voltage	$V_{RRM}$	50	100	200	400	600	800	1000	V
Maximum RMS voltage	$V_{RMS}$	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	$V_{DC}$	50	100	200	400	600	800	1000	V
Maximum average forward rectified current	$I_F$	3							A
Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load	$I_{FSM}$	100							A
Maximum Instantaneous Forward Voltage @ $I_F=3A$	$V_F$	1.15							V
Maximum DC Reverse Current at Rated DC Blocking Voltage	$I_R$	$T_A=25^{\circ}\text{C}$							$\mu\text{A}$
		$T_A=100^{\circ}\text{C}$							
Typical Junction Capacitance <sup>1</sup>	$C_J$	60							pF
Thermal Resistance Junction to Ambient <sup>2</sup>	$R_{\theta JA}$	28							$^{\circ}\text{C} / \text{W}$
Thermal Resistance Junction to Lead <sup>2</sup>	$R_{\theta JL}$	5							
Storage and Operating Temperature Range	$T_J, T_{STG}$	-55 ~ 150, -55 ~ 150							$^{\circ}\text{C}$

Notes :

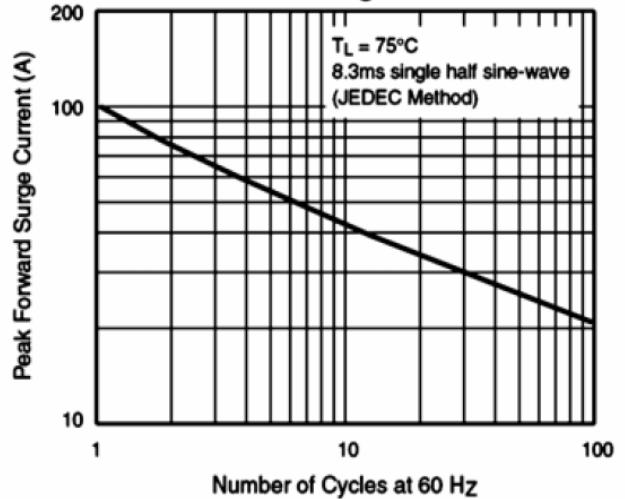
1. Measured at 1.0MHz and applied reverse voltage of 4.0V DC
2. FR4 Board Heat sink size: 30\*30mm.

**MAXIMUM RATINGS CURVES**

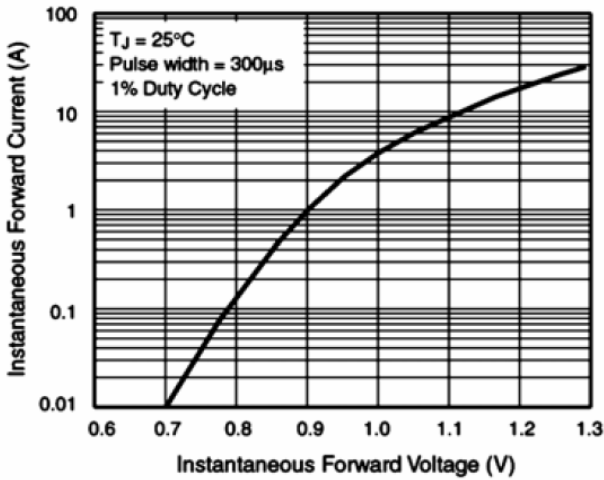
**Fig. 1 - Forward Current Derating Curve**



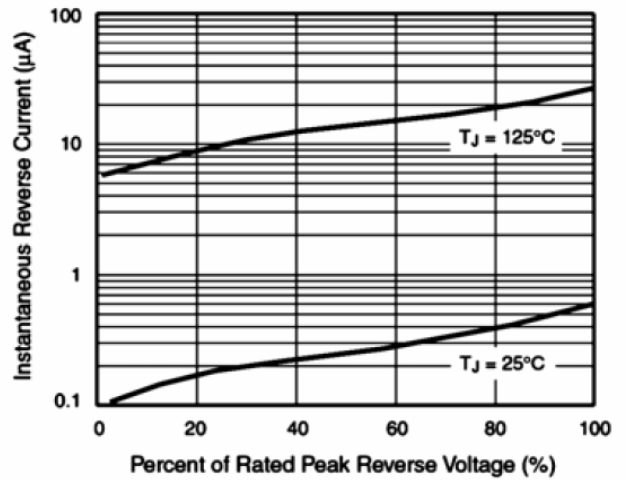
**Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current**



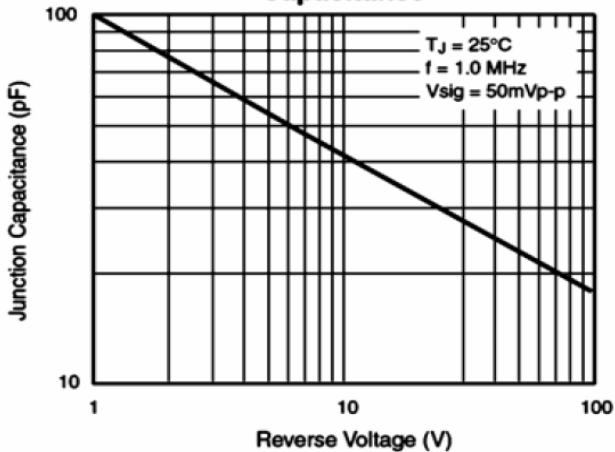
**Fig. 3 - Typical Instantaneous Forward Characteristics**



**Fig. 4 - Typical Reverse Characteristics**



**Fig. 5 - Typical Junction Capacitance**



**Fig. 6 - Typical Transient Thermal Impedance**

