

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

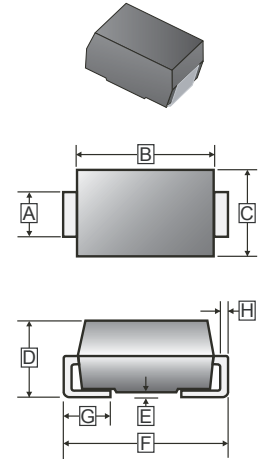
SMC(DO-214AB)

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)



PACKAGE INFORMATION

Product	MPQ	LeaderSize
QG501C~QG507C	3K / Reel	13" inch

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

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

Parameters	Symbol	Part Number							Units
		QG 501C	QG 502C	QG 503C	QG 504C	QG 505C	QG 506C	QG 507C	
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	5.0							A
Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	125							A
Maximum Instantaneous Forward Voltage @ $I_F=5A$	V_F	1.15							V
Maximum DC Reverse Current at Rated DC Blocking Voltage @ $T_A=25^\circ\text{C}$	I_R	5							μA
@ $T_A=100^\circ\text{C}$		50							
Typical Junction Capacitance (Note 1)	C_J	60							pF
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	100							$^\circ\text{C} / \text{W}$
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

MAXIMUM RATINGS CURVES

FIG. 1-TYPICAL FORWARD CURRENT DERATING CURVE

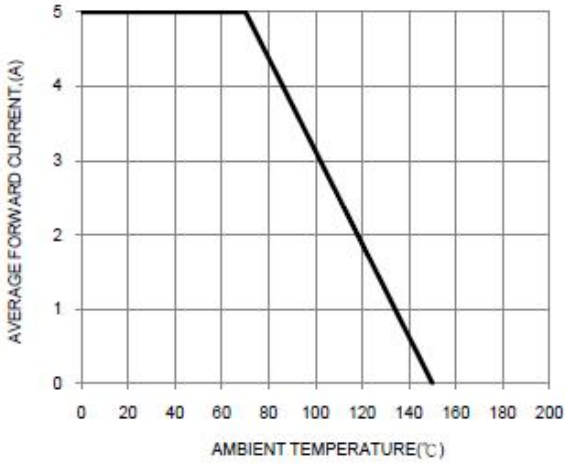


FIG. 2-TYPICAL FORWARD CHARACTERISTICS

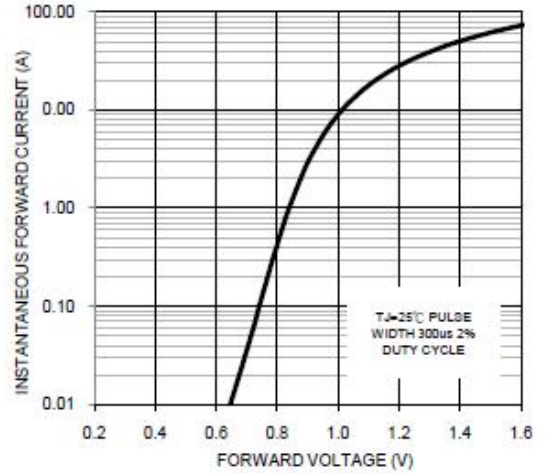


FIG. 3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

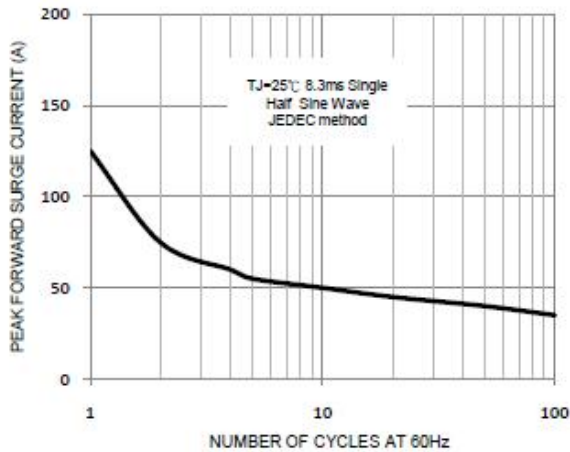


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

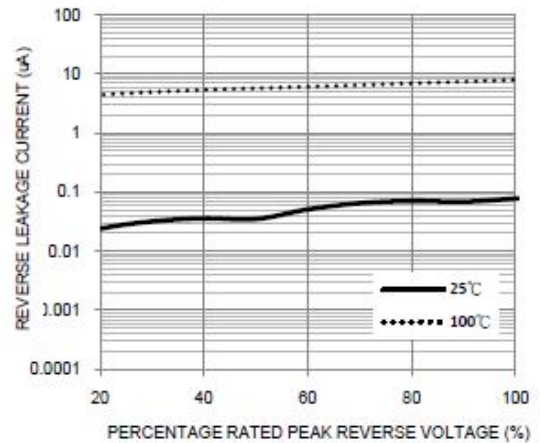


FIG. 5-TYPICAL JUNCTION CAPACITANCE

