

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

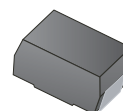
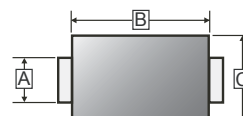
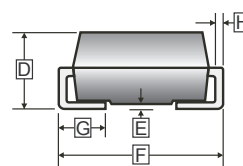
FEATURES

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

MECHANICAL DATA

- Cases: SMC
- 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)

SMC



PACKAGE INFORMATION

Package	MPQ	Leader Size
SMC	3K	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°C unless otherwise noted)

Parameters		Symbol	Part Number						Unit	
			QG 801C	QG 802C	QG 803C	QG 804C	QG 805C	QG 806C		QG 807C
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	8						A	
Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load		I _{FSM}	200						A	
Maximum Instantaneous Forward Voltage @ I _F =8A		V _F	1.1						V	
Maximum DC Reverse Current at Rated DC Blocking Voltage	T _C =25°C	I _R	5						μA	
	T _C =100°C		50							
Typical Junction Capacitance ¹		C _J	50						pF	
Thermal Resistance Junction to Ambient ²		R _{θJA}	28						°C / W	
Thermal Resistance Junction to Lead ²		R _{θJL}	5						°C / W	
Storage and Operating Temperature Range		T _J , T _{STG}	-55 ~ 150						°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-TYPICAL FORWARD CURRENT DERATING CURVE

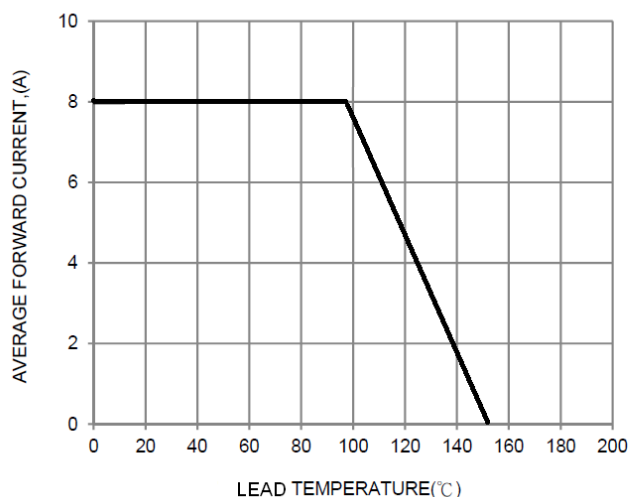


FIG. 2-TYPICAL FORWARD CHARACTERISTICS

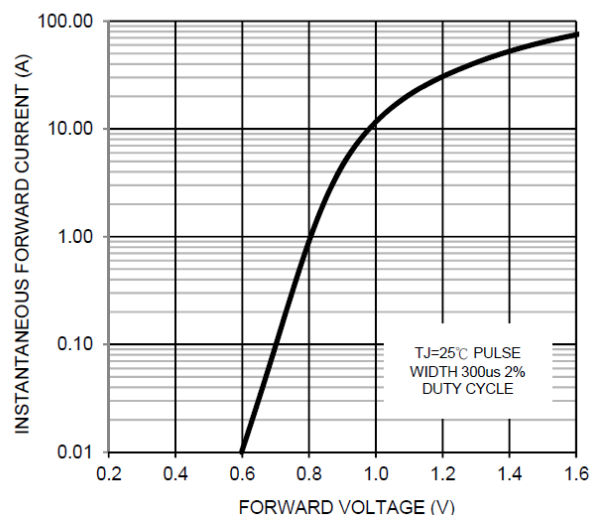


FIG. 3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

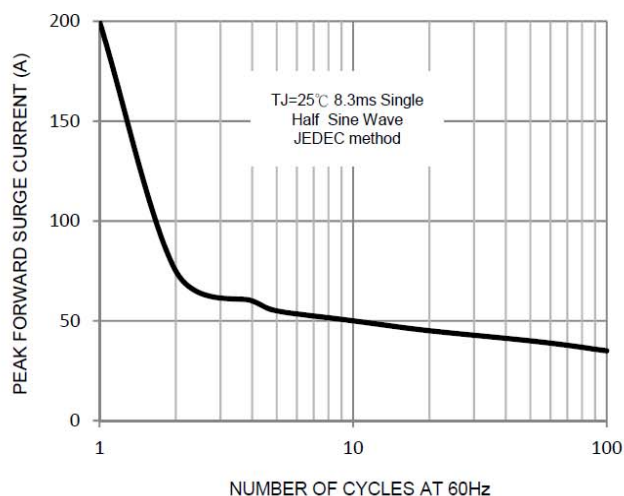


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

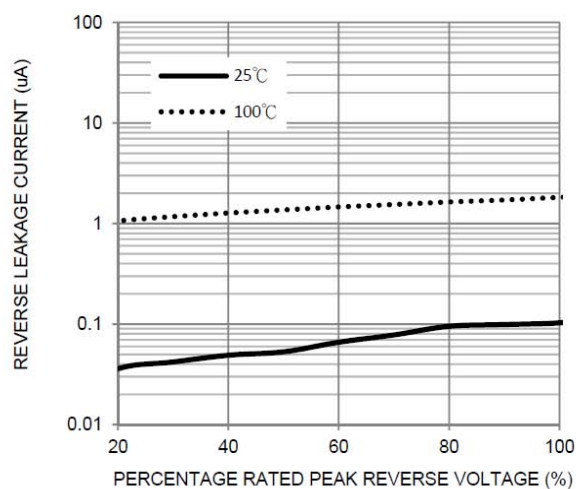


FIG. 5-TYPICAL JUNCTION CAPACITANCE

