

RoHS Compliant Product

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

## FEATURES

- High reliability
- High surge current capability
- Low reverse current
- High efficiency

## MECHANICAL DATA

- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0
- Terminals: Tin plated leads, solderable per J-STD 002 and JESD22-B102
- Polarity: Color band denotes cathode band

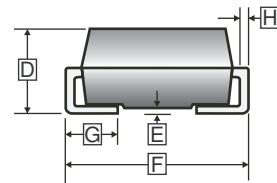
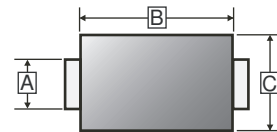
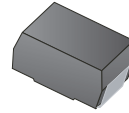
## PACKAGE INFORMATION

Package	MPQ	Leader Size
SMC	3K	13 inch

## ORDER INFORMATION

Part Number	Type
QG801C-C~QG807C-C	Lead (Pb)-free and Halogen-free

SMC



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	2.750	3.270	E	-	0.203
B	6.520	7.110	F	7.640	8.170
C	5.50	6.220	G	0.750	1.520
D	1.980	2.620	H	0.23 TYP	

## MAXIMUM RATINGS (T<sub>A</sub>=25°C unless otherwise noted)

Parameters	Symbol	Part Number								Unit
		QG	QG	QG	QG	QG	QG	QG	QG	
		801C-C	802C-C	803C-C	804C-C	805C-C	806C-C	807C-C		
Maximum Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	50	100	200	400	600	800	1000		V
Average Rectified Output Current @60Hz sine wave, Resistance load, T <sub>A</sub> =50°C	I <sub>O</sub>	8								A
Forward Surge Current, (Non-repetitive) @60Hz Half-sine wave, 1 cycle, T <sub>A</sub> =25°C	I <sub>FSM</sub>	200								A
Maximum Instantaneous Forward Voltage @I <sub>F</sub> =8A	V <sub>F</sub>	1.1								V
Maximum DC Reverse Current @Rated DC Blocking Voltage	I <sub>R</sub>	10								μA
		50								
Typical Junction Capacitance <sup>1</sup>	C <sub>J</sub>	60								pF
Thermal Resistance Junction-Ambient <sup>2</sup>	R <sub>θJA</sub>	45								°C/W
Thermal Resistance Junction-Lead <sup>2</sup>	R <sub>θJL</sub>	12								°C/W
Storage and Operating Temperature Range	T <sub>J</sub> , T <sub>STG</sub>	-55 ~ 150								°C

Notes:

1. Measured at 1MHz and applied reverse voltage of 4V DC
2. Mounted on P.C.B. with 0.6" x 0.6" copper pad areas

**MAXIMUM RATINGS CURVES**

FIG.1: I<sub>o</sub>-TL Curve

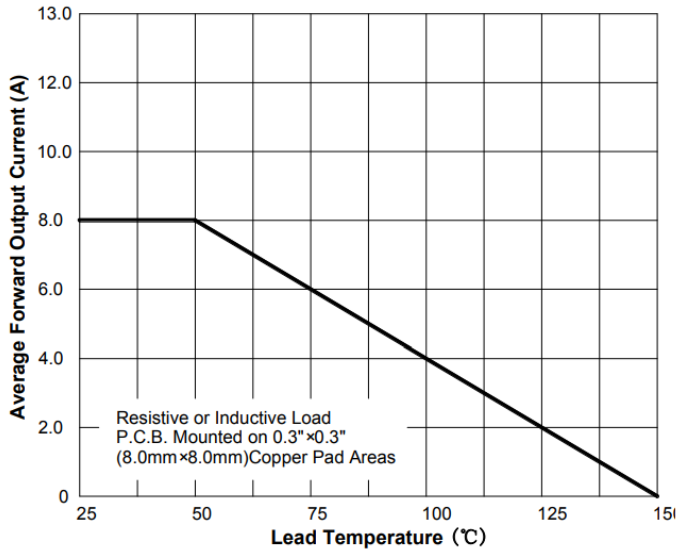


FIG.2: Forward Surge Current Capability

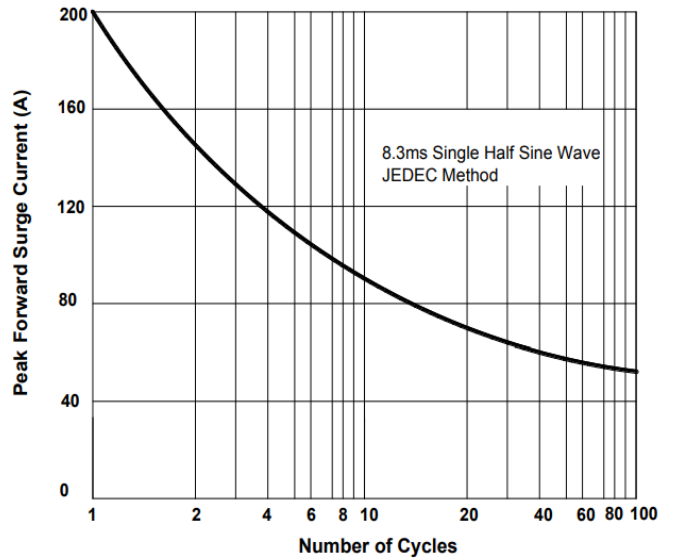


FIG.3: Forward Voltage

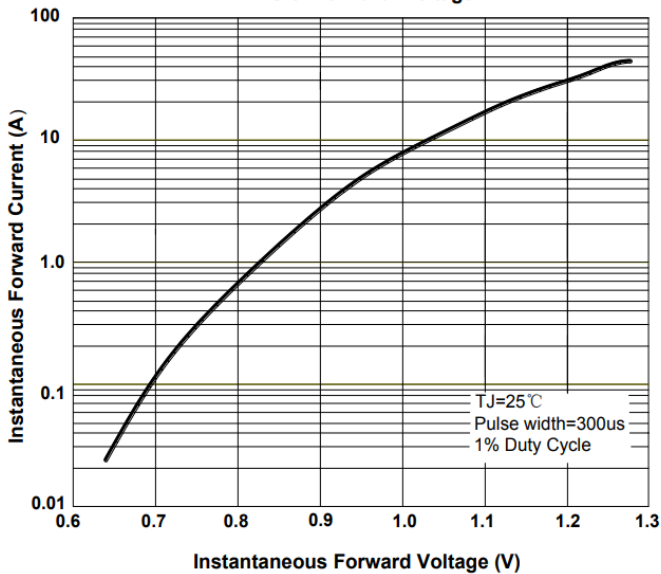


FIG.4: Typical Reverse Characteristics

