

RoHS Compliant Product

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

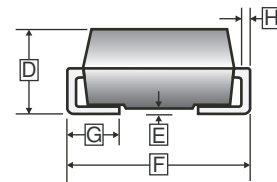
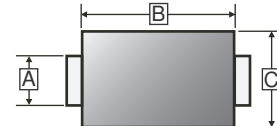
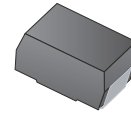
FEATURES

- For surface mounted applications
- Ideal for automated placement
- Low forward voltage drop
- High surge current capability

MECHANICAL DATA

- Cases : SMB (DO-214AA)
- Case Material : Molded Plastic. UL Flammability Classification Rating 94V-0
- Terminals : Solder plated, solderable per MIL- STD-202, Method 208
- Polarity : Color band denotes cathode end

SMB



PACKAGE INFORMATION

Package	MPQ	Leader Size
SMB	5K	13 inch

REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	1.85	2.20	E	-	0.25
B	4.00	4.85	F	5.05	5.59
C	3.25	3.94	G	0.75	1.55
D	1.90	2.61	H	0.15	0.31

ORDER INFORMATION

Part Number	Type
QG503B-C~QG507B-C	Lead (Pb)-free and Halogen-free

MAXIMUM RATINGS (T_A=25°C unless otherwise specified)

Parameters	Symbol	Part Number					Units
		QG 503B-C	QG 504B-C	QG 505B-C	QG 506B-C	QG 507B-C	
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	200	400	600	800	1000	V
Maximum RMS Voltage	V _{RMS}	140	280	420	560	700	
Maximum DC Blocking Voltage	V _{DC}	200	400	600	800	1000	
Maximum Average Forward Rectified Current	I _F	5					A
Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load, T _J =25°C	I _{FSM}	125					A
Maximum Instantaneous Forward Voltage @I _F =5A	V _F	1.15					V
Maximum DC Reverse Current @Rated DC Blocking Voltage	T _A =25°C	10					µA
	T _A =125°C	250					
Typical Thermal Resistance ¹	R _{θJA}	47					°C/W
	R _{θJC}	20					
	R _{θJL}	13					
Storage and Operating Temperature Range	T _J , T _{STG}	-55~150					°C

Note :

1. Device mounted on PCB with 30mm x 30mm copper pad areas.

MAXIMUM RATINGS CURVES

FIG. 1-Typical Forward Current Derating Curve

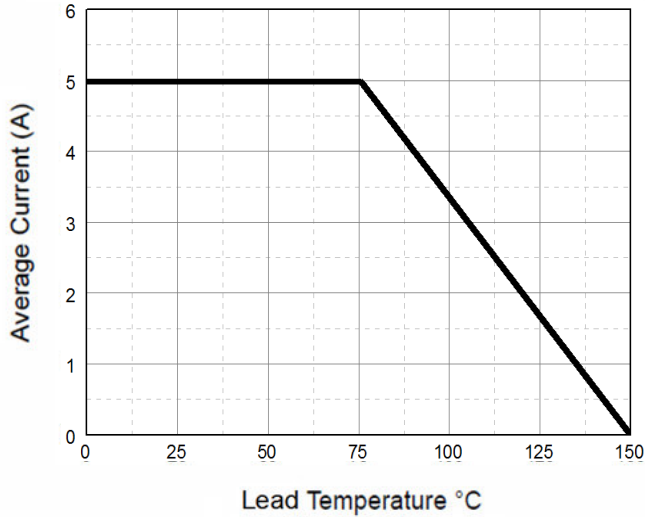


FIG. 2-Maximum Non-Repetitive Forward Surge Current

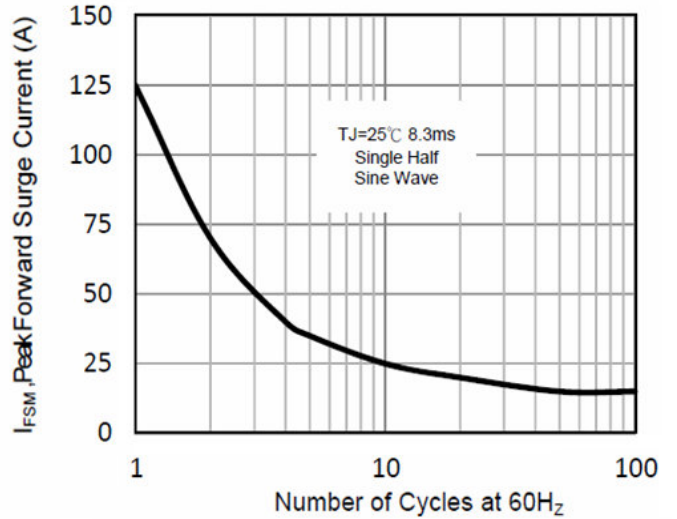


FIG. 3-Typical Forward Characteristics

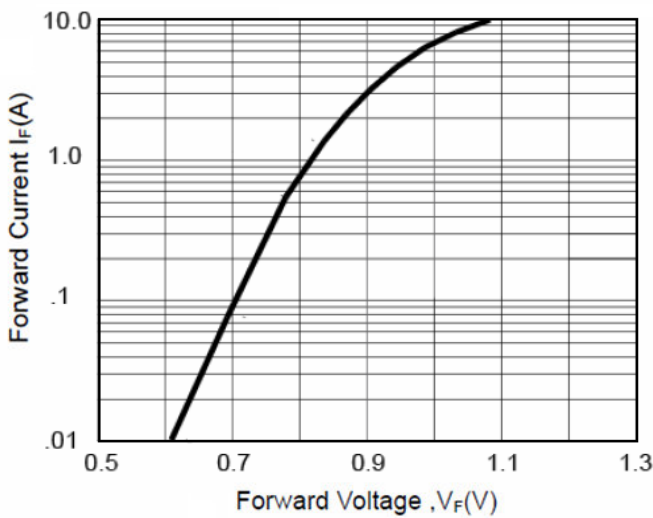


FIG. 4-Typical Reverse Characteristics

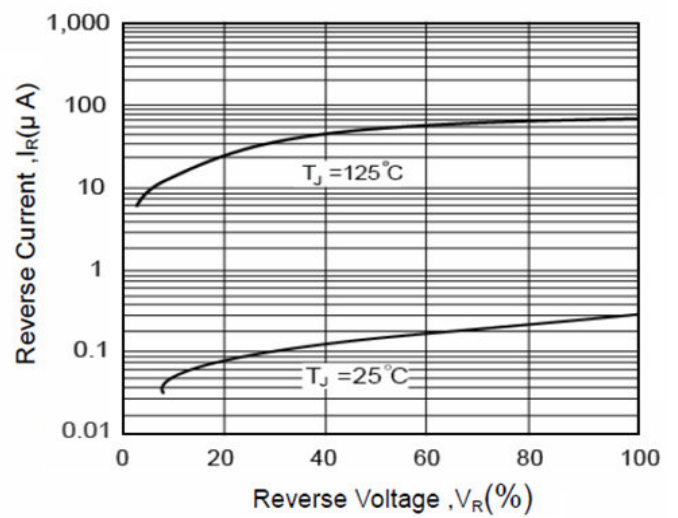


FIG. 5-Typical Junction Capacitance

