

RoHS Compliant Product

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

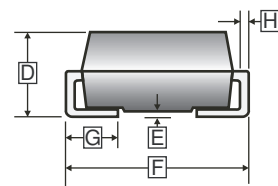
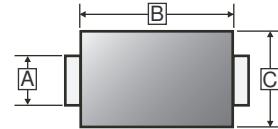
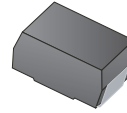
FEATURES

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

MECHANICAL DATA

- Cases : SMB(DO-214AA)
- 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

SMB



PACKAGE INFORMATION

Package	MPQ	Leader Size
SMB	3K	13 inch

REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	1.85	2.20	E	-	0.203
B	4.00	4.75	F	5.08	5.59
C	3.25	3.94	G	0.75	1.52
D	1.99	2.61	H	0.15	0.31

ORDER INFORMATION

Part Number	Type
QG301B-C~QG307B-C	Lead (Pb)-free and Halogen-free

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

Parameters	Symbol	Part Number							Units
		QG 301B-C	QG 302B-C	QG 303B-C	QG 304B-C	QG 305B-C	QG 306B-C	QG 307B-C	
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	10							μA
		250							
Typical Junction Capacitance ¹	C _J	40							pF
Thermal Resistance Junction to Lead ²	R _{θJL}	16							°C/W
Storage and Operating Temperature Range	T _J , T _{STG}	-55 ~ 150, -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

FIG1: I_o-T_L Curve

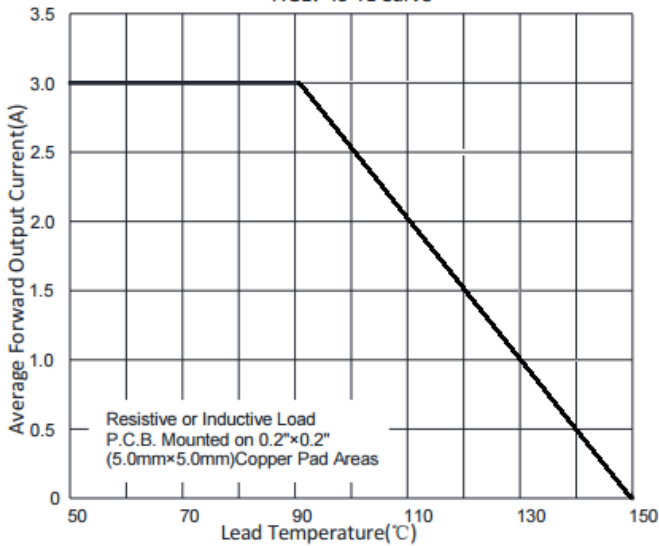


FIG2: Surge Forward Current Capability

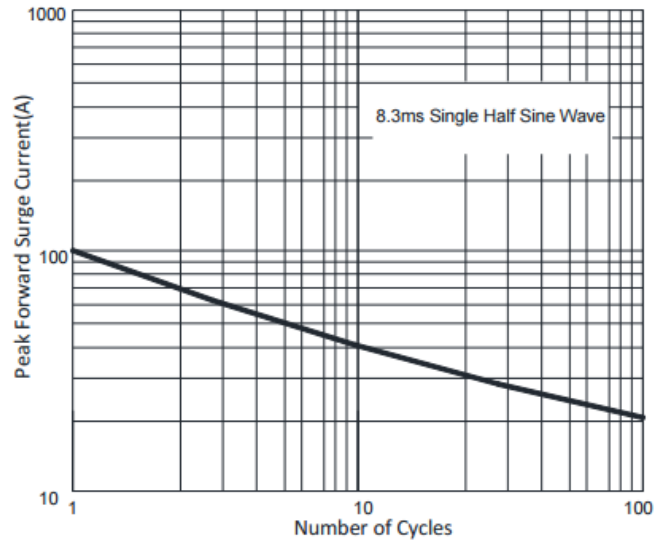


FIG3: Forward Voltage

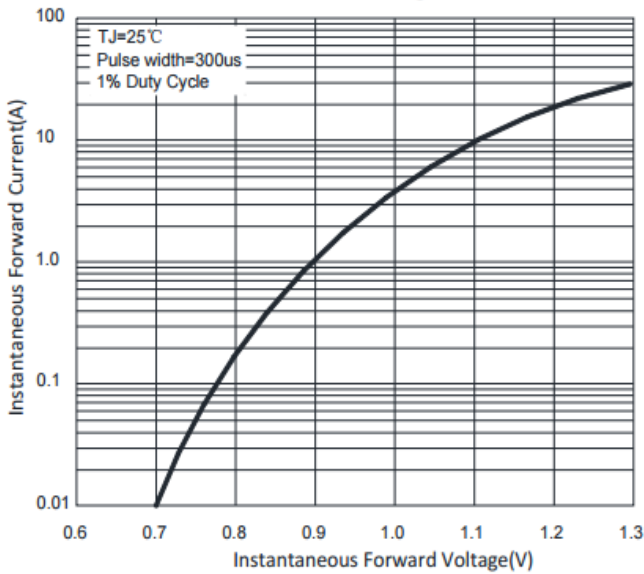


FIG4: Typical Reverse Characteristics

