Elektronische Bauelemente

QG201B~QG207B

50 ~ 1000 V

2.0 Amp Surface Mount Silicon Rectifiers

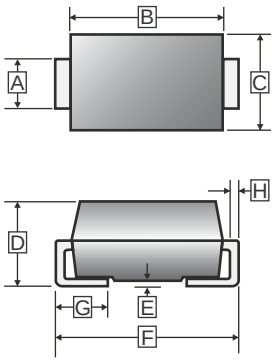
RoHS Compliant Product

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

FEATURES

- Ideal for surface mount applications
- Easy pick and place
- Built-in strain relief
- High surge current capability

SMB



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	1.91	2.20	E	-	0.203
B	4.06	4.75	F	5.08	5.59
C	3.30	3.94	G	0.76	1.52
D	1.95	2.65	H	0.15	0.31

PACKAGING INFORMATION

- Polarity: Color band denotes cathode end
- Case: Molded plastic
- Terminals: Solder plated, solderable per MIL-STD-202F, method 208 guaranteed
- Epoxy: UL94-V0 rate flame retardant
- Weight: 0.102 grams (approximately)

PACKAGE INFORMATION

Package	MPQ	Leader Size
SMB	3K	13 inch

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(Rating 25°C ambient temperature unless otherwise specified. Single phase half wave, 60Hz, resistive or inductive load. For capacitive load, de-rate current by 20%.)

Parameters		Symbol	Part Number							Unit
			QG 201B	QG 202B	QG 203B	QG 204B	QG 205B	QG 206B	QG 207B	
Maximum Recurrent 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 Instantaneous Forward Voltage @ I_F = 2.0 A		V_F	1.25							V
Maximum Forward Average Forward Rectified Current		I_O	2.0							A
Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load (JEDEC method)		I_{FSM}	50							A
Maximum Reverse Current	T_J=25°C	I_R	5.0							μA
	T_J=100°C		100							
Typical Thermal Resistance		$R_{\theta JA}$	53							°C/W
Typical Thermal Resistance		$R_{\theta JL}$	16							°C/W
Typical Diode Junction Capacitance [1]		C_J	35							pF
Storage and Operating Temperature Range		T_{STG}, T_J	55~150							°C

NOTES:

1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.

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RATINGS AND CHARACTERISTIC CURVES

FIG. 1 - FORWARD CURRENT DERATING CURVE

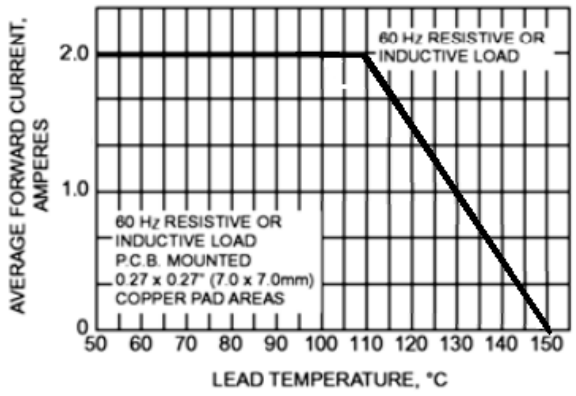

FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

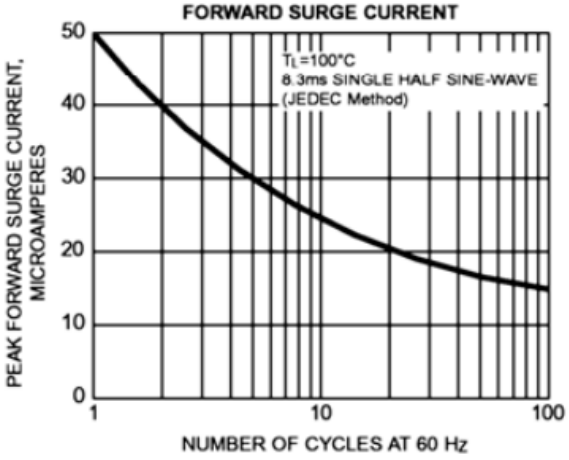

FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

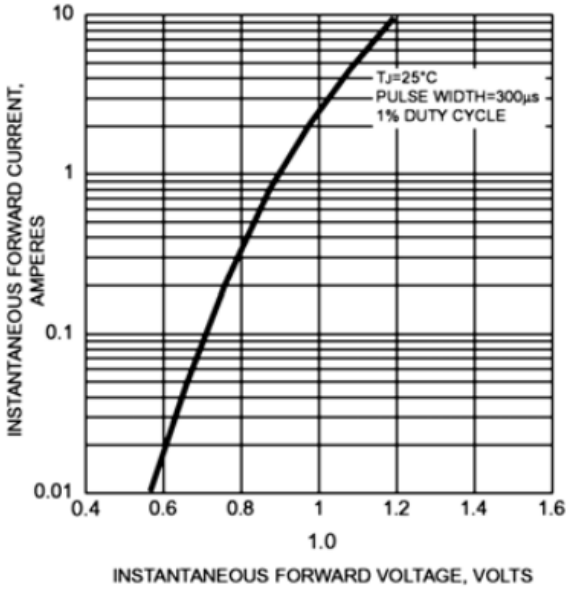

FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

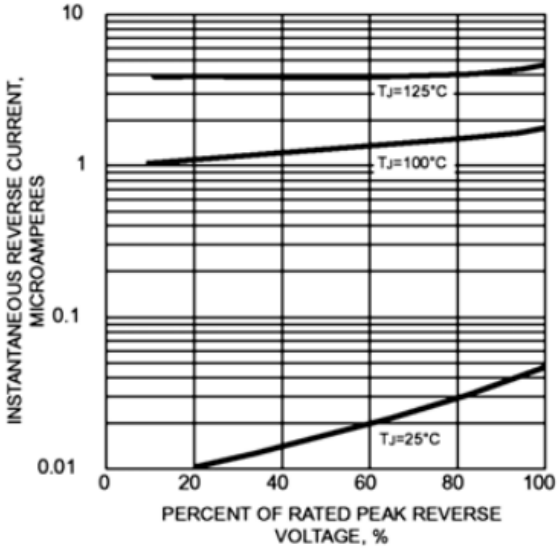

FIG. 5 - TYPICAL JUNCTION CAPACITANCE