Elektronische Bauelemente

QG301AM~QG307AM

Voltage 50 ~ 1000 V

3.0Amp Surface Mount Silicon Rectifiers

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

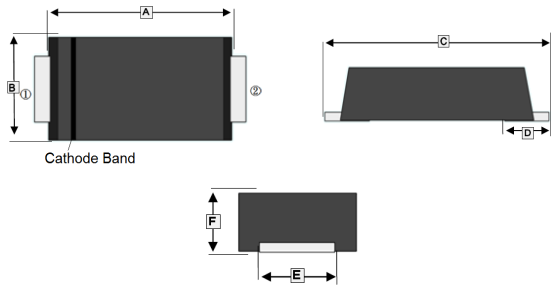
FEATURES

- Low profile package
- Glass Passivated Chip Juntion
- Lead free in comply with EU RoHS 2011/65/EU directives

MECHANICAL DATA

- Case : SMAM
- Terminals: Solderable per MIL-STD-750, Method 2026
- Weight: 27 mgram (Approximate)

SMAM



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	3.30	3.70	D	0.80	1.20
B	2.40	2.70	E	1.30	1.60
C	4.40	4.90	F	0.90	1.10

MARKING

Part Number	Marking Code	Part Number	Marking Code
QG301AM	S3A	QG305AM	S3J
QG302AM	S3B	QG306AM	S3K
QG303AM	S3D	QG307AM	S3M
QG304AM	S3G		

PACKAGE INFORMATION

Package	MPQ	Leader Size
SMAM	3K	7 inch

ABSOLUTE MAXIMUM RATINGS

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

Parameter	Symbol	Part Number							Unit
		QG 301AM	QG 302AM	QG 303AM	QG 304AM	QG 305AM	QG 306AM	QG 307AM	
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	1.2							V
Maximum DC Reverse Current at Rated DC Blocking Voltage T_A=25℃	I_R	5							μA
Maximum DC Reverse Current at Rated DC Blocking Voltage T_A=125℃	I_R	250							μA
Typical Junction Capacitance [1]	C_J	53							pF
Typical Thermal Resistance [2]	$R_{\theta JL}$	22							℃/W
Typical Thermal Resistance [2]	$R_{\theta JC}$	30							℃/W
Operating & Storage Temperature	T_J,T_{STG}	-55~ 150							℃

Notes:
1. Measured at 1 MHz and applied reverse voltage of 4 V D.C
2. P.C.B. mounted with 10 X 10 x 0.2 mm copper pad areas.

RATINGS AND CHARACTERISTIC CURVES

Fig.1 Forward Current Derating Curve

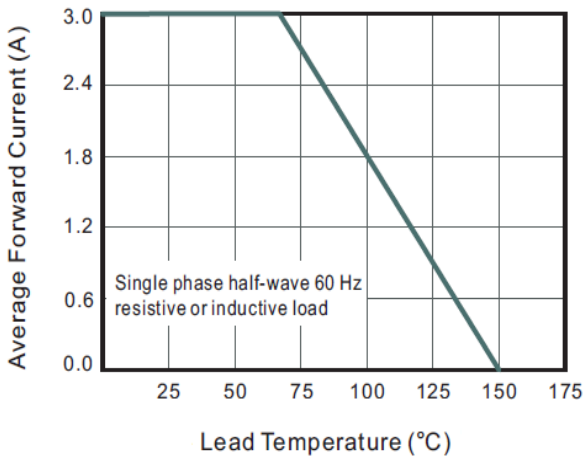


Fig.2 Typical Instaneous Reverse Characteristics

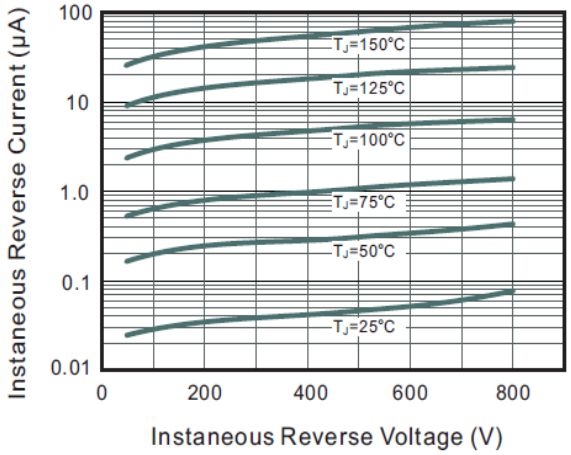


Fig.3 Typical Forward Characteristic

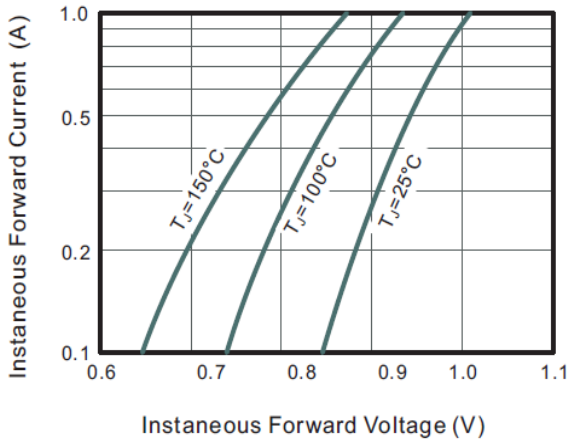


Fig.4 Typical Junction Capacitance

