

RoHS Compliant Product

A suffix of "-C" specifies halogen & lead-free

SMA

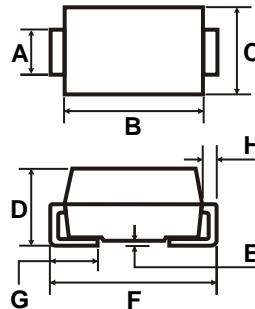
FEATURES

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



MECHANICAL DATA

- * Case: Molded plastic
- * Epoxy: UL 94V-0 rate flame retardant
- * Terminals: Solder plated, solderable per MIL-STD-202F, method 208 guaranteed
- * Polarity: Color band denotes cathode end
- * Mounting position: Any
- * Weight: 0.063 gram



| | Dimensions in Millimeters | | Dimensions in Inches | |
|----------|---------------------------|-------|----------------------|-------|
| | A | B | C | D |
| A | 1.25 | 1.65 | 0.049 | 0.065 |
| B | 3.99 | 4.60 | 0.157 | 0.181 |
| C | 2.50 | 2.90 | 0.098 | 0.114 |
| D | 1.98 | 2.44 | 0.078 | 0.096 |
| E | 0.051 | 0.203 | 0.002 | 0.008 |
| F | 4.78 | 5.28 | 0.188 | 0.208 |
| G | 0.76 | 1.52 | 0.030 | 0.060 |
| H | 0.152 | 0.305 | 0.006 | 0.012 |

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, derate current by 20%.

| TYPE NUMBER | QG201A | QG202A | QG203A | QG204A | QG205A | QG206A | QG207A | UNITS | |
|--|--------|--------|--------|--------|--------|--------|--------|------------|------|
| Maximum Recurrent Peak Reverse Voltage | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V | |
| Maximum RMS Voltage | 35 | 70 | 140 | 280 | 420 | 560 | 700 | V | |
| Maximum DC Blocking Voltage | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V | |
| Maximum Average Forward Rectified Current | | | | | | | | | |
| .375"(9.5mm) Lead Length at Ta=75°C | | | | | | | | 2.0 | A |
| Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method) | | | | | | | | 50 | A |
| Maximum Instantaneous Forward Voltage at 2.0A | | | | | | | | 1.1 | V |
| Maximum DC Reverse Current Ta=25°C | | | | | | | | 5.0 | µA |
| at Rated DC Blocking Voltage Ta=100°C | | | | | | | | 50 | µA |
| Typical Junction Capacitance (Note 1) | | | | | | | | 15 | pF |
| Typical Thermal Resistance RθJA (Note 2) | | | | | | | | 50 | °C/W |
| Operating and Storage Temperature Range Tj, Tstg | | | | | | | | -65 — +175 | °C |

NOTES:

1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
2. Thermal Resistance from Junction to Ambient.

RATING AND CHARACTERISTIC CURVES (QG201A THRU QG207A)

FIG.1-TYPICAL FORWARD CHARACTERISTICS

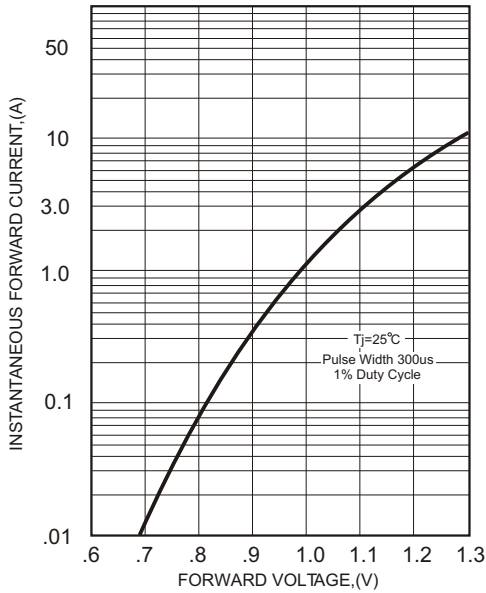


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

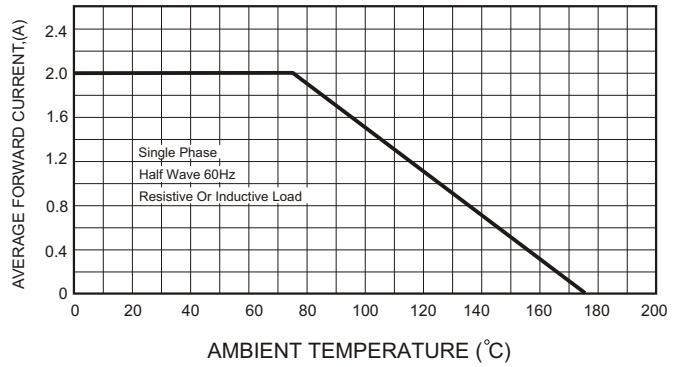


FIG.4-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

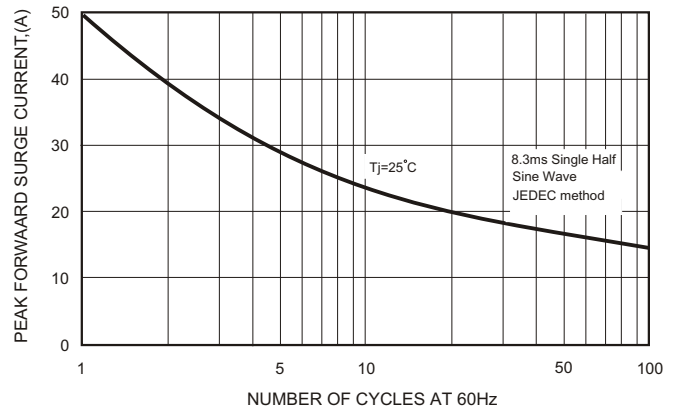


FIG.3 - TYPICAL REVERSE CHARACTERISTICS

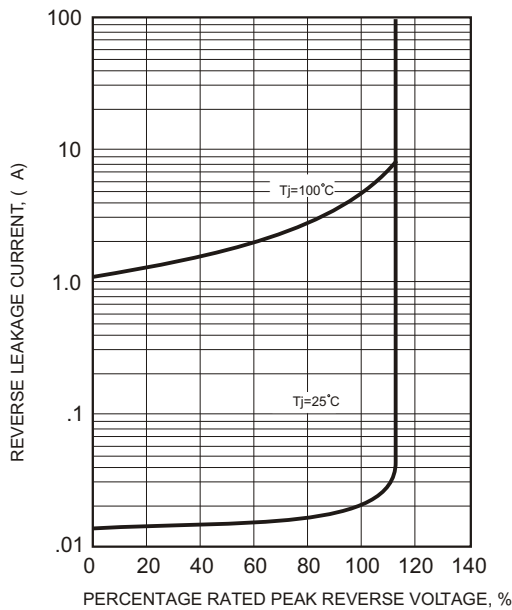


FIG.5-TYPICAL JUNCTION CAPACITANCE

