

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

FEATURES

- Ideal for Surface Mount Applications
- Easy Pick and Place
- Built-In Strain Relief
- High Surge Current Capability

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

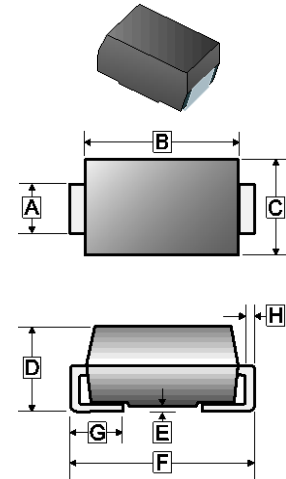
PACKAGE INFORMATION

| Package | MPQ | Leader Size |
|---------|-----|-------------|
| SMB | 3K | 13 inch |

ORDER INFORMATION

| Part Number | Type |
|-------------------|---------------------------------|
| QG201B-C~QG207B-C | Lead (Pb)-free and Halogen-free |

SMB



| 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 |

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-C | QG 202B-C | QG 203B-C | QG 204B-C | QG 205B-C | QG 206B-C | QG 207B-C | |
| 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 | |
| Maximum DC Blocking Voltage | V_{DC} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | |
| Maximum Instantaneous Forward Voltage @ $I_F=2A$ | V_F | 1.25 | | | | | | | V |
| Maximum Forward Average Forward Rectified Current | I_O | 2 | | | | | | | A |
| Peak Forward Surge Current, 8.3ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method) | I_{FSM} | 50 | | | | | | | A |
| Maximum Reverse Current | $T_J=25^\circ C$ | 5 | | | | | | | μA |
| | $T_J=100^\circ C$ | 100 | | | | | | | |
| Typical Thermal Resistance | $R_{\theta JA}$ | 53 | | | | | | | $^\circ C/W$ |
| Typical Thermal Resistance | $R_{\theta JL}$ | 16 | | | | | | | |
| Typical Diode Junction Capacitance ¹ | C_J | 35 | | | | | | | pF |
| Operating & Storage Temperature Range | T_J, T_{STG} | -55~150 | | | | | | | $^\circ C$ |

Note:

1. Measured at 1MHz and applied reverse voltage of 4V D.C.

RATINGS AND CHARACTERISTIC CURVES

FIG. 1 - FORWARD CURRENT DERATING CURVE

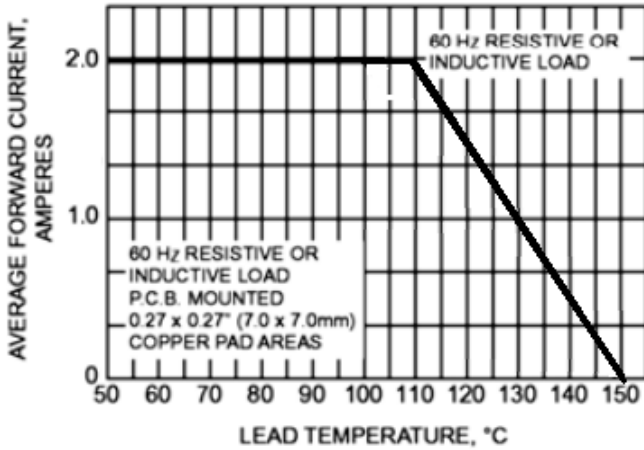


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

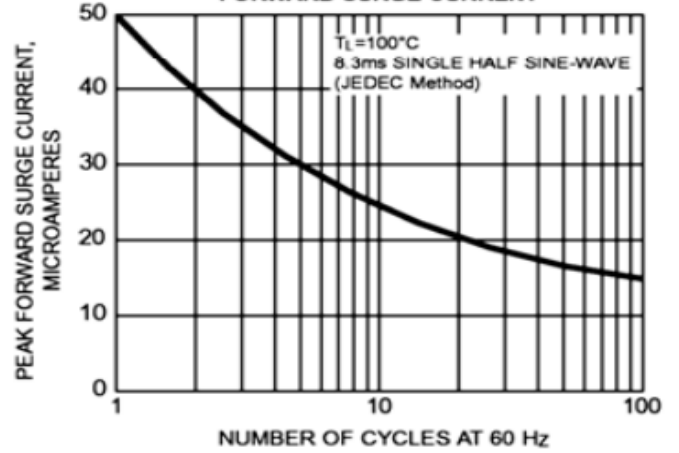


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

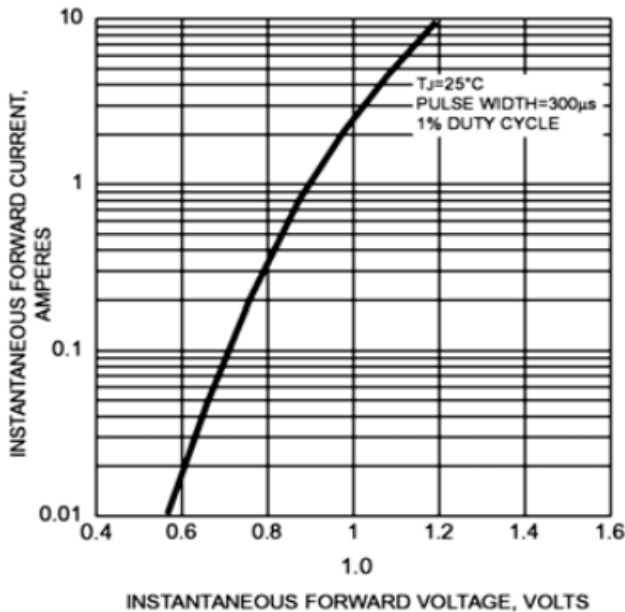


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

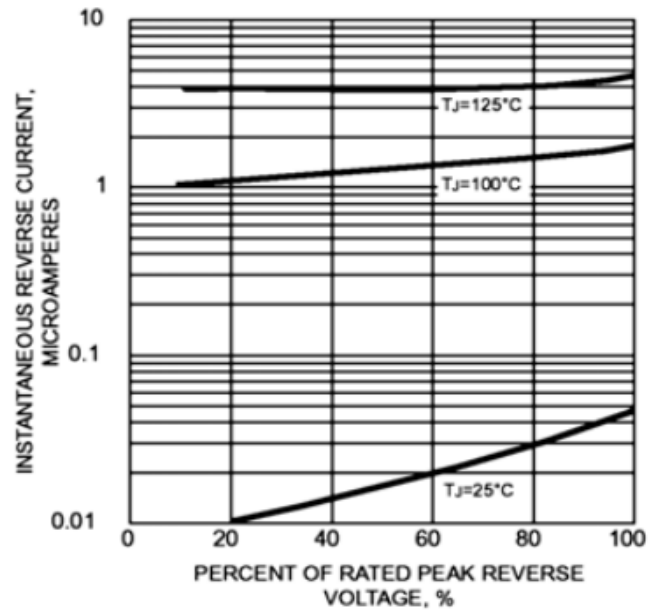


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

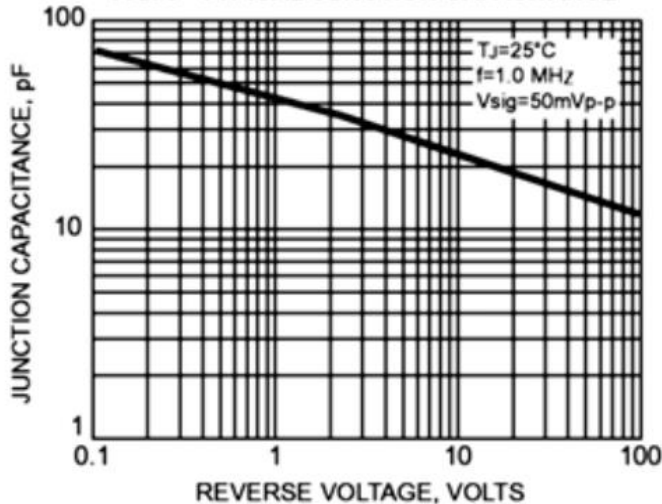
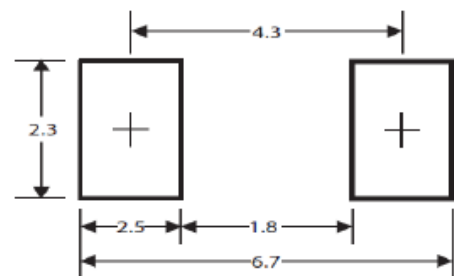


FIG. 6 - MOUNTING PAD LAYOUT



*Dimensions in millimeters