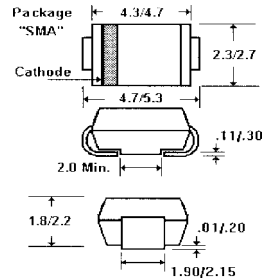


Description



Mechanical Dimensions

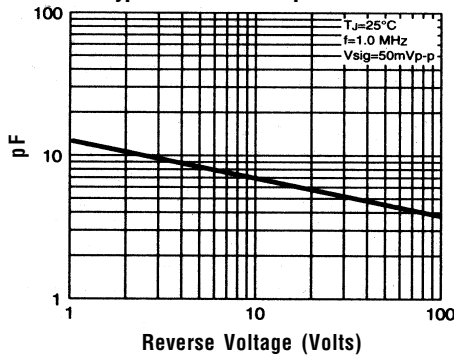


Features

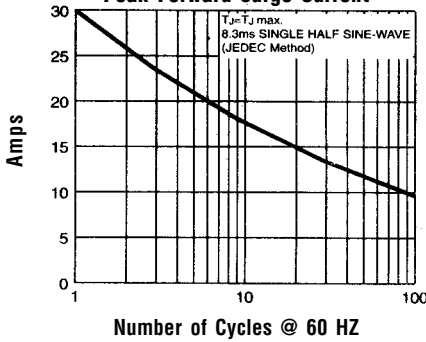
- HIGH TEMPERATURE METALLURGICALLY BONDED CONSTRUCTION
- FAST SWITCHING FOR HIGH EFFICIENCY
- CAPABILITY OF MEETING ENVIRONMENTAL STANDARDS OF MIL-S-19500

| Electrical Characteristics @ 25°C. | RGF1A . . . RGF1M Series | | | | | | | Units | |
|--|--------------------------|-------|-------|------------|-------|-------|--------------------|--------------------|----|
| Maximum Ratings | RGF1A | RGF1B | RGF1D | RGF1G | RGF1J | RGF1K | RGF1M | | |
| Peak Repetitive Reverse Voltage... V_{RRM} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | Volts | |
| RMS Reverse Voltage... $V_{R(rms)}$ | 35 | 70 | 140 | 280 | 420 | 560 | 700 | Volts | |
| DC Blocking Voltage... V_{DC} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | Volts | |
| Average Forward Rectified Current... $I_{F(av)}$ AT $T_A = 120^\circ\text{C}$ | ..... |  |  | 1.0 | ..... |  |  | Amps | |
| Non-Repetitive Peak Forward Surge Current... I_{FSM} 8.3 mS, 1/2 Sine Wave Superimposed on Rated Load | ..... |  |  | 30 | ..... |  |  | Amps | |
| Forward Voltage @ 1.0A... V_F | ..... |  |  | 1.3 | ..... |  |  | Volts | |
| Full Load Reverse Current... $I_{R(av)}$ Full Cycle Average @ $T_A = 55^\circ\text{C}$ | ..... |  |  | 50 | ..... |  |  | μAmps | |
| DC Reverse Current... I_R @ Rated DC Blocking Voltage | ..... |  |  | 5 | ..... |  |  | μAmps | |
|  | ..... |  |  | 100 | ..... |  |  | μAmps | |
| Typical Junction Capacitance... C_j (Note 1) | ..... |  |  | 8.5 | ..... |  |  | pF | |
| Typical Thermal Resistance... $R_{\theta JL}$ (Note 2) | ..... |  |  | 28 | ..... |  |  | $^\circ\text{C/W}$ | |
| Typical Reverse Recovery Time... t_{RR} (Note 3) | < | | 150 | > | | 250 | < 500 > | | nS |
| Operating & Storage Temperature Range... T_J, T_{STRG} | ..... |  |  | -65 to 175 | ..... |  |  | $^\circ\text{C}$ | |

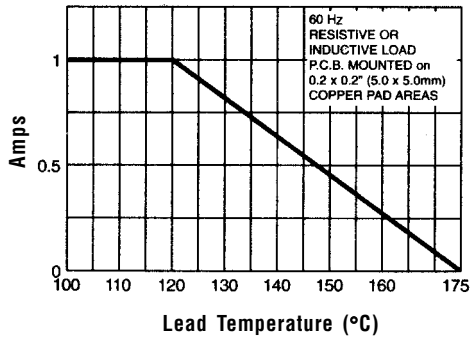
Typical Junction Capacitance



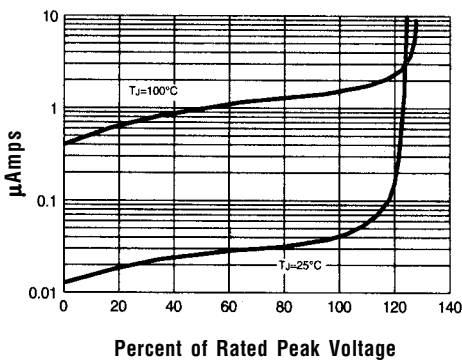
Non-Repetitive Peak Forward Surge Current



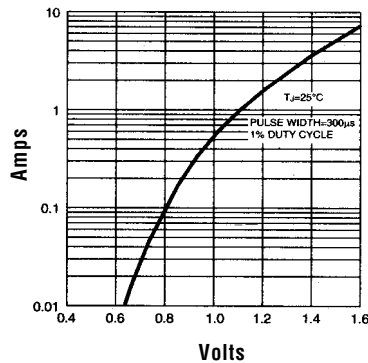
Forward Current Derating Curve



Typical Reverse Characteristics



Typical Instantaneous Forward Characteristics



Ratings at 25 Deg. C ambient temperature unless otherwise specified.

Single Phase Half Wave, 60 HZ Resistive or Inductive Load.

For Capacitive Load, Derate Current by 20%.

- NOTES:** 1. Measured @ 125°C, $I_F = 3$ Amps.
 2. Measured with Pulse Width = 300uS, 2% Duty Cycle.