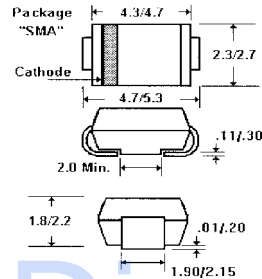


Description



Mechanical Dimensions

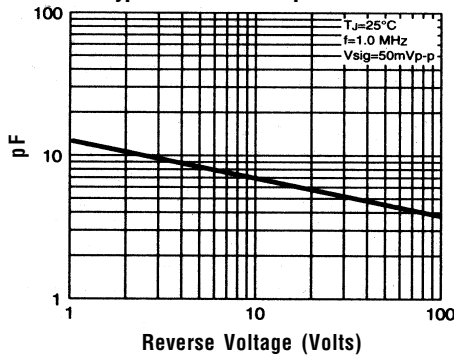


Features

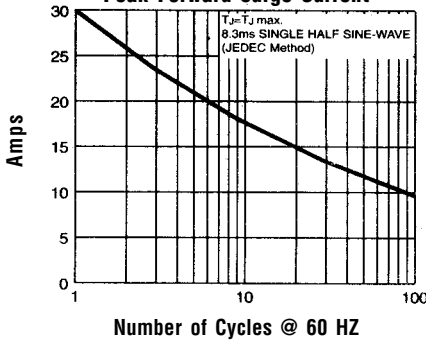
- HIGH TEMPERATURE METALLURGICALLY BONDED CONSTRUCTION
- FAST SWITCHING FOR HIGH EFFICIENCY
- CAPABILITY OF MEETING ENVIRONMENTAL STANDARDS OF MIL-S-19500

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	.....			$^\circ\text{C}$

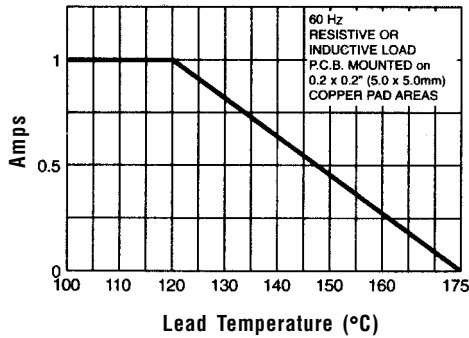
Typical Junction Capacitance



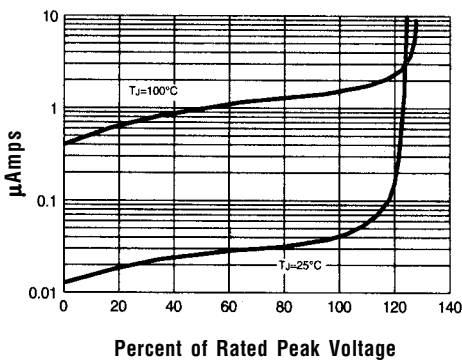
Non-Repetitive Peak Forward Surge Current



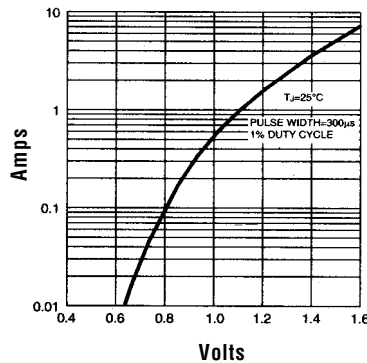
Forward Current Derating Curve



Typical Reverse Characteristics



Typical Instantaneous Forward Characteristics



Ratings at 25°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 , $I_F = 3\text{ Amps}$.
2. Measured with Pulse Width = $300\mu\text{s}$, 2% Duty Cycle.