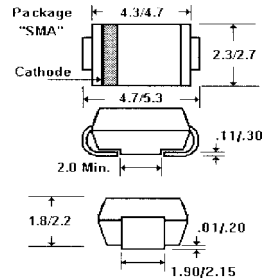


## Description



## Mechanical Dimensions

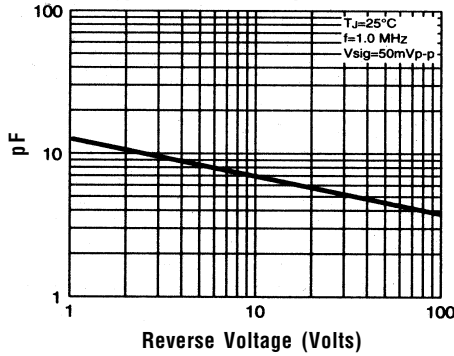


## Features

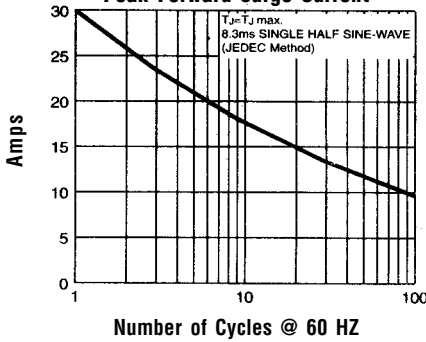
- HIGH TEMPERATURE METALLURGICALLY BONDED CONSTRUCTION
- FAST SWITCHING FOR HIGH EFFICIENCY
- CAPABILITY OF MEETING ENVIRONMENTAL STANDARDS OF MIL-S-19500

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, ½ 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				°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				°C	

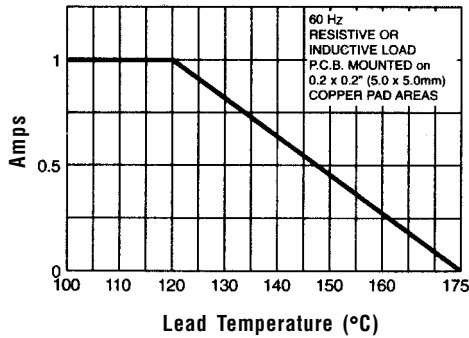
**Typical Junction Capacitance**



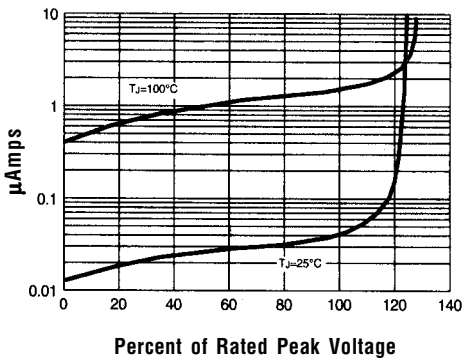
**Non-Repetitive Peak Forward Surge Current**



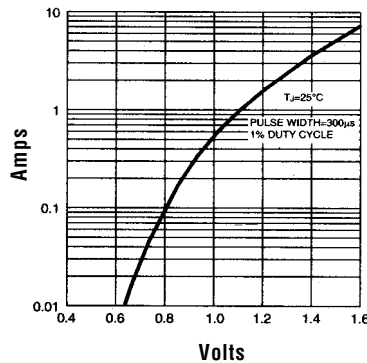
**Forward Current Derating Curve**



**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 = 300 $\mu$ s, 2% Duty Cycle.