

9261 Owensmouth Ave.
Chatsworth, Ca 91311
Phone: (818) 701-4933
Fax: (818) 701-4939

RGF1A THRU RGF1M

Features

- Low Current Leakage
- Metallurgical Bonded Construction
- Glass Passivation Cavity Free Junction
- Capable Of Meeting MIL-S-19500 Environmental Standards
- Fast Recovery Times For High Efficiency

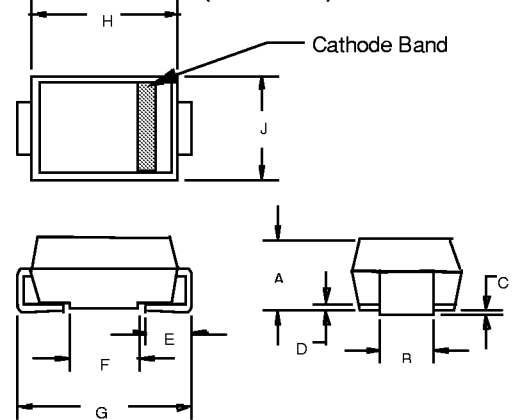
Maximum Ratings

- Operating Temperature: -65°C to +175°C
- Storage Temperature: -65°C to +150°C
- Maximum Thermal Resistance; 15°C/W Junction To Ambient

Microsemi Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
RGF1A	RGF1A	50V	35V	50V
RGF1B	RGF1B	100V	70V	100V
RGF1D	RGF1D	200V	140V	200V
RGF1G	RGF1G	400V	280V	400V
RGF1J	RGF1J	600V	420V	600V
RGF1K	RGF1K	800V	560V	800V
RGF1M	RGF1M	1000V	700V	1000V

Sintered Glass 1 Amp Fast Recovery Silicon Rectifier 50 to 1000 Volts

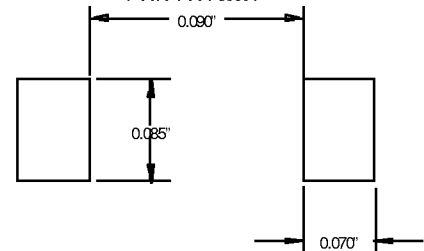
DO-214AA (SMBJ)



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.075	.115	1.90	2.92	1
B	.081	.087	2.06	2.21	
C	.004	.008	.10	.20	
D	---	.02	---	.51	
E	.030	.060	.76	1.52	
F	.065	.084	1.65	2.13	
G	.205	.220	5.21	5.59	
H	.160	.150	4.06	4.57	
J	.130	.155	3.30	3.94	

1) Maximum Jeduc Spec is .096" or 2.44 MM

SUGGESTED SOLDER PAD LAYOUT

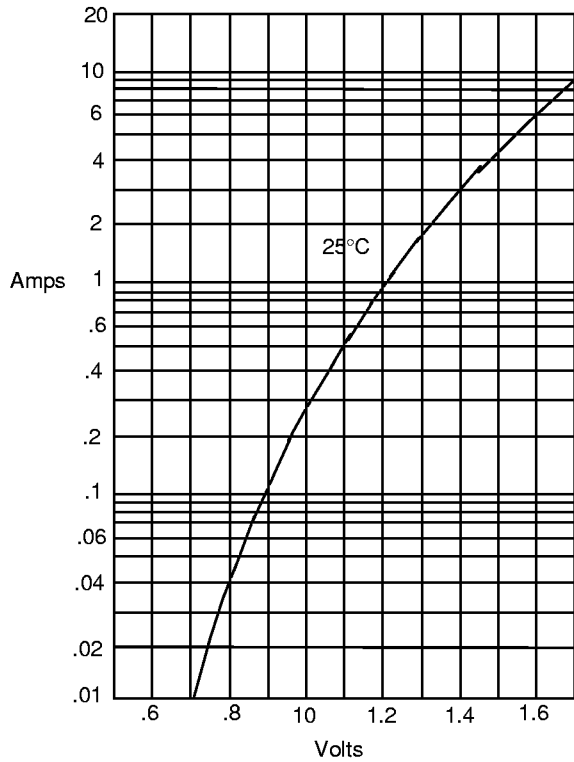


Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward current	$I_{F(AV)}$	1.0A	$T_L = 120^\circ\text{C}$
Peak Forward Surge Current	I_{FSM}	30A	8.3ms, half sine
Maximum Instantaneous Forward Voltage	V_F	1.30V	$I_{FM} = 1.0A$; $T_J = 25^\circ\text{C}^*$
Maximum DC Reverse Current At Rated DC Blocking Voltage	I_R	5 μA 100 μA	$T_A = 25^\circ\text{C}$ $T_A = 125^\circ\text{C}$
Maximum Reverse Recovery Time	T_{rr}	150ns 250ns 500ns	$I_F = 0.5A$, $I_R = 1.0A$, $I_{rr} = 0.25A$
Typical Junction Capacitance	C_J	50pF	Measured at 1.0MHz, $V_R = 4.0V$

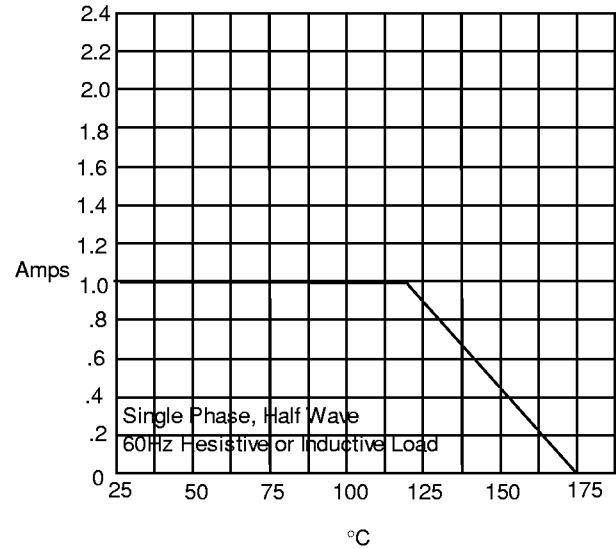
RGF1A thru RGF1M

Figure 1
Typical Forward Characteristics



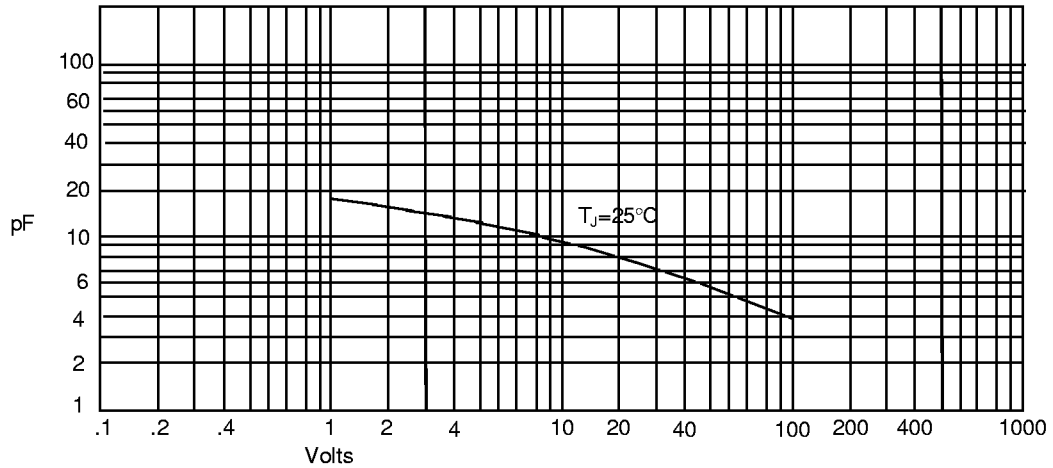
Instantaneous Forward Current - Amperes *versus*
Instantaneous Forward Voltage - Volts

Figure 2
Forward Derating Curve



Average Forward Rectified Current - Amperes
versus

Figure 3
Junction Capacitance



Junction Capacitance - pF *versus*
Reverse Voltage - Volts

RGF1A thru RGF1M

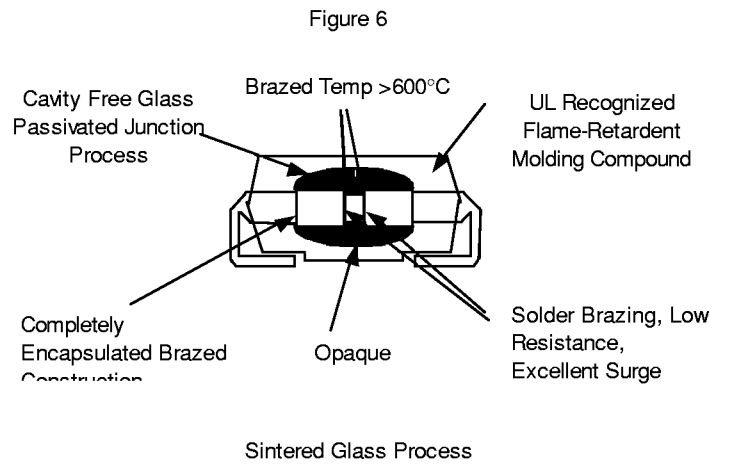
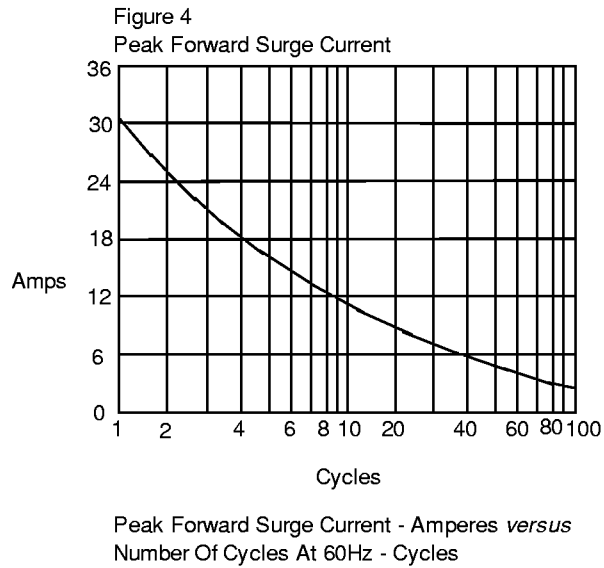
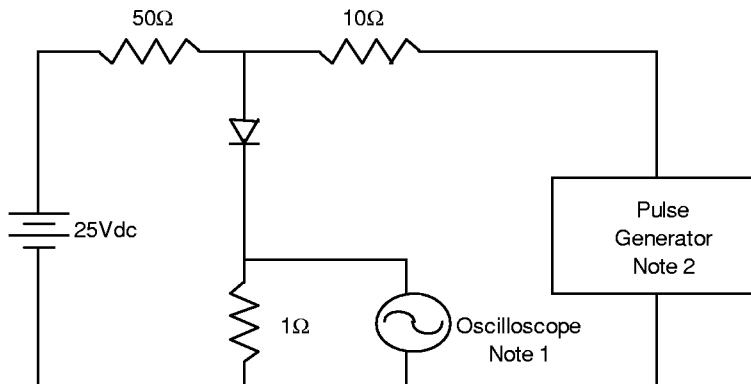


Figure 7
Reverse Recovery Time Characteristic And Test Circuit Diagram



Notes:

1. Rise Time = 7ns max.
Input impedance = 1 megohm, 22pF
2. Rise Time = 10ns max.
Source impedance = 50 ohms
3. Resistors are non-inductive

