

**GF1A
THRU
GF1M**

Features

- Low Current Leakage
- Metallurgical Bonded Construction
- Glass Passivated Cavity Free Junction
- Capable Of Meeting MIL-S-19500 Environmental Standards

Maximum Ratings

- Operating Temperature: -65°C to +175°C
- Storage Temperature: -65°C to +175°C
- Typical Thermal Resistance; 30°C/W Junction To Ambient

Microsemi Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
GF1A	GF1A	50V	35V	50V
GF1B	GF1B	100V	70V	100V
GF1D	GF1D	200V	140V	200V
GF1G	GF1G	400V	280V	400V
GF1J	GF1J	600V	420V	600V
GF1K	GF1K	800V	560V	800V
GF1M	GF1M	1000V	700V	1000V

Electrical Characteristics @ 25°C Unless Otherwise Specified

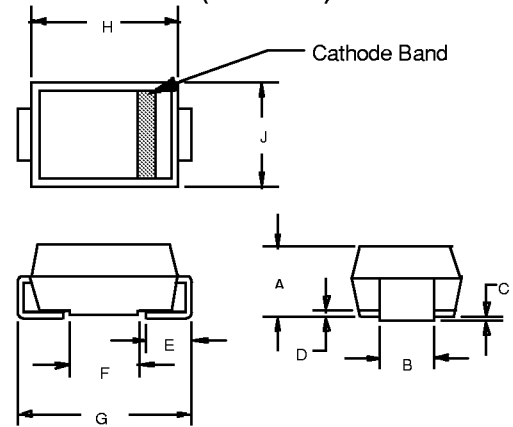
Average Forward current	$I_{F(AV)}$	1.0A	$T_L = 125^\circ\text{C}$
Peak Forward Surge Current	I_{FSM}	30A	8.3ms, half sine, $T_J = 150^\circ\text{C}$
Maximum Instantaneous Forward Voltage	V_F	1.1V 1.2V	$I_{FM} = 1.0A$; $T_A = 25^\circ\text{C}^*$
Maximum DC Reverse Current At Rated DC Blocking Voltage	I_R	5 μA 50 μA	$T_A = 25^\circ\text{C}$ $T_A = 125^\circ\text{C}$
Typical Junction Capacitance	C_J	15pF	Measured at 1.0MHz, $V_R=4.0V$

*Pulse test: Pulse width 300 μsec , Duty cycle 2%

Santa Ana: (714) 979-8220
 Scottsdale: (602) 941-6300
 Colorado: (303) 469-2161
 Watertown: (617) 926-0404
 Chatsworth: (818) 701-4933
 Serstech Labs: (617) 924-9280
 Ireland: (353) 65-40044
 Bombay: (91) 22-832-002
 Hong Kong: (852) 2692-1202

**Sintered Glass
1 Amp
Silicon Rectifier
50 to 1000 Volts**

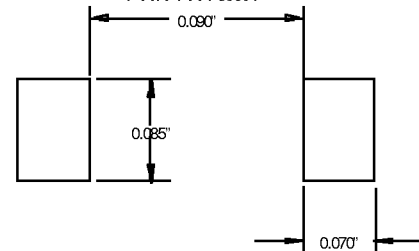
DO-214BA
(SMBJ)



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**



GF1A thru GF1M

Figure 1
Typical Forward Characteristics

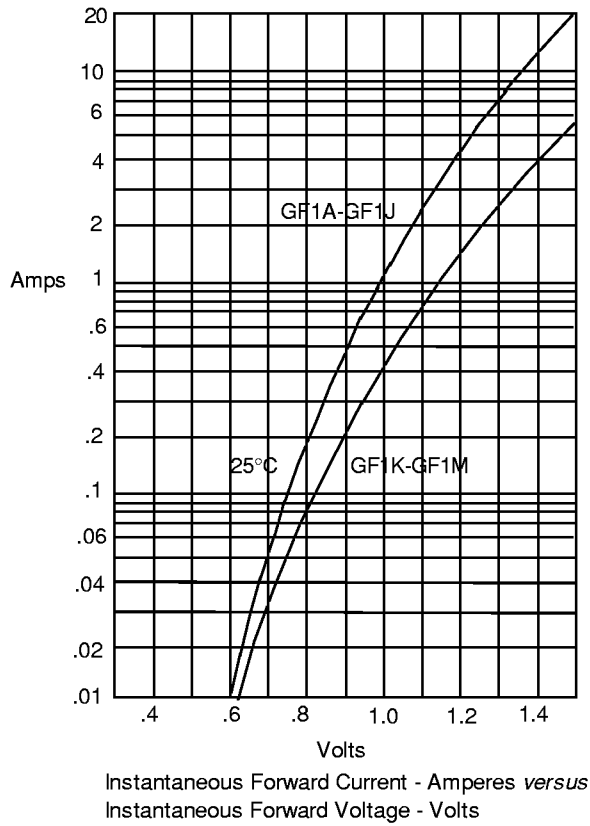
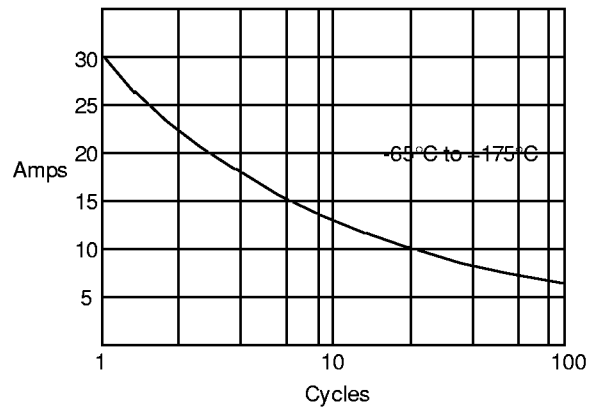
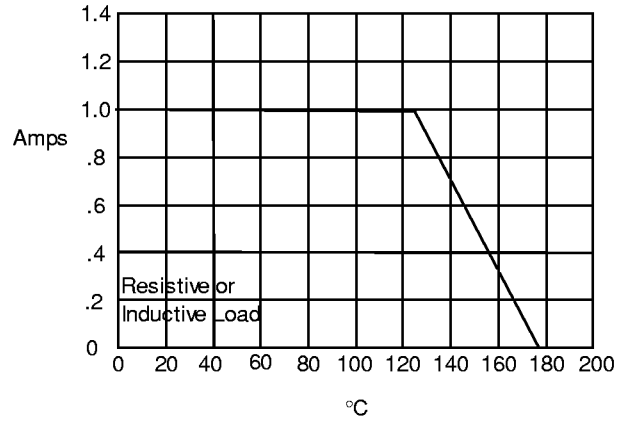


Figure 3
Maximum Overload Surge Current



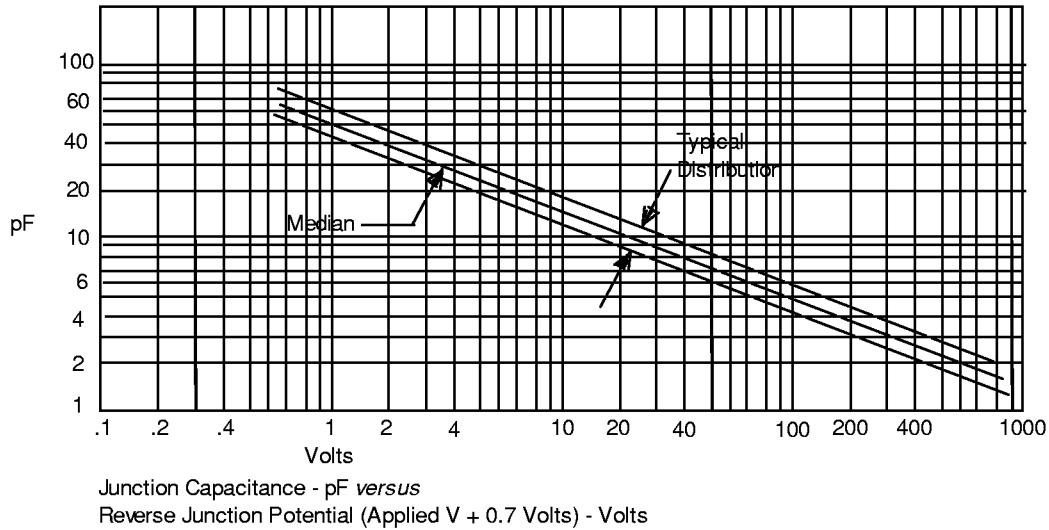
Peak Forward Current - Amperes versus
Number of Cycles at 60Hz

Figure 4
Forward Derating Curve

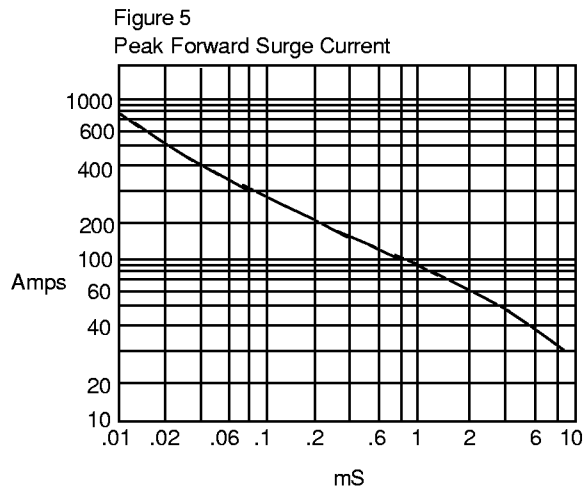


Average Forward Rectified Current - Amperes
versus

Figure 2
Junction Capacitance



GF1A thru GF1M



Peak Forward Surge Current - Amperes *versus* Pulse Duration - Milliseconds (mS)

