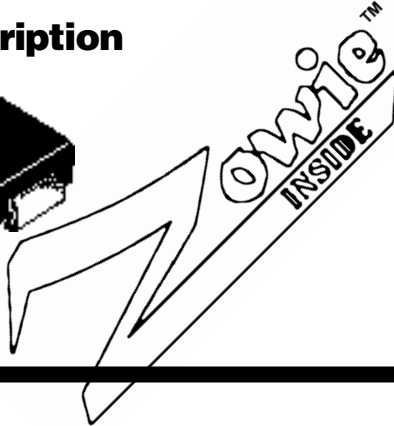


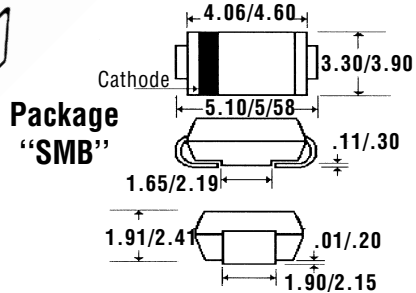


**GFZ20A . . . 20M Series**

## Description



## Mechanical Dimensions

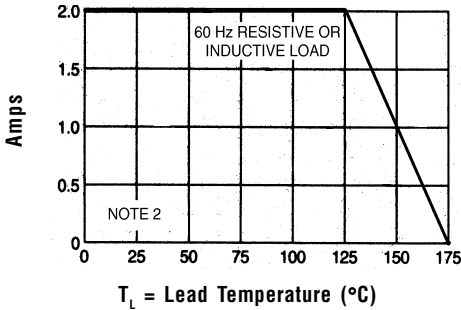


## Features

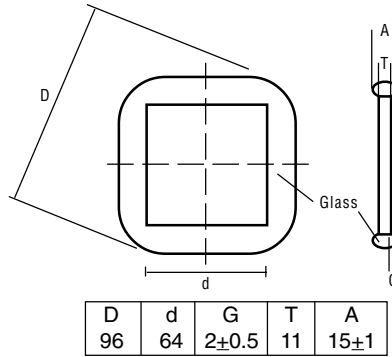
- **LOWEST COST FOR GLASS SINTERED CONSTRUCTION**
- **LOWEST  $V_F$  FOR GLASS SINTERED CONSTRUCTION**
- **TYPICAL  $I_R < 100$  nAmps**
- **2.0 AMP OPERATION @  $T_A = 125^\circ\text{C}$ , WITH NO THERMAL RUNAWAY**
- **SINTERED GLASS CAVITY-FREE JUNCTION**

Electrical Characteristics @ 25°C.	GFZ20A . . . 20M Series								Units
Maximum Ratings	20A	20B	20D	20G	20J	20K	20M		
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... $I_{F(av)}$ @ $T_L = 125^\circ\text{C}$ (Note 2)	..... 2.0 .....								Amps
Non-Repetitive Peak Forward Surge Current... $I_{FSM}$ 8.3ms, 1/2 Sine Wave Superimposed on Rated Load	..... 65 .....								Amps
Forward Voltage @ 2.0A... $V_F$	< ..... 1.1 ..... > < ..... 1.2 ..... >								Volts
Full Load Reverse Current... $I_R(av)$ Full Cycle Average @ $T_A = 55^\circ\text{C}$	..... 100 .....								μAmps
DC Reverse Current... $I_{R(max)}$ @ Rated DC Blocking Voltage	$T_A = 25^\circ\text{C}$			..... 5.0 .....					μAmps
	$T_A = 150^\circ\text{C}$			..... 100 .....					
Typical Junction Capacitance... $C_j$ (Note 1)	..... 20 .....								pF
Typical Thermal Resistance... $R_{\theta JA}$ (Note 2)	..... 16 .....								°C/W
Typical Reverse Recovery Time... $t_{RR}$ (Note 3)	..... 2.5 .....								μs
Operating & Storage Temperature Range... $T_J, T_{STRG}$	..... -65 to 175 .....								°C

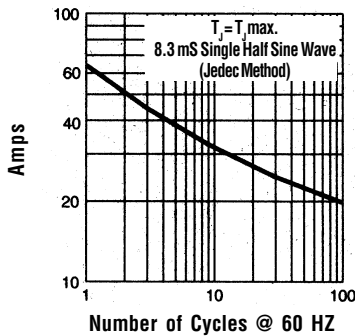
**Forward Current Derating Curve**



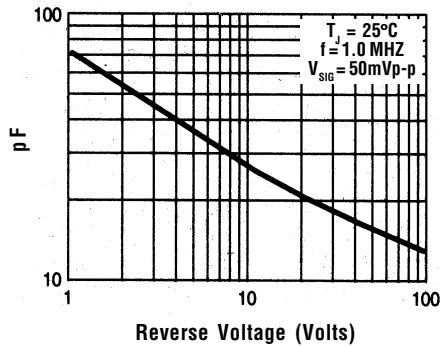
**Die Dimension (mils)**



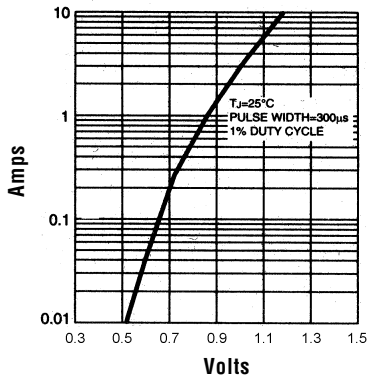
**Non-Repetitive Peak Forward Surge Current**



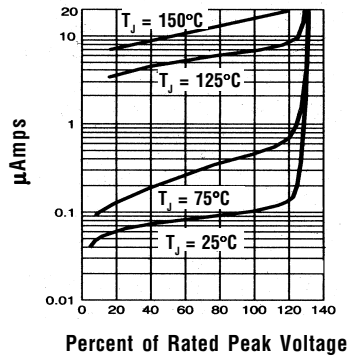
**Typical Junction Capacitance**



**Typical Instantaneous Forward Characteristics**



**Typical Reverse 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 @ 1 MHz and applied reverse voltage of 4.0V.
  2. 5.0mm<sup>2</sup> (.013mm thick) land areas.
  3. Reverse Recovery Condition  $I_F = 0.5\text{A}$ ,  $I_R = 1.0\text{A}$ ,  $I_{RR} = 0.25\text{A}$ .