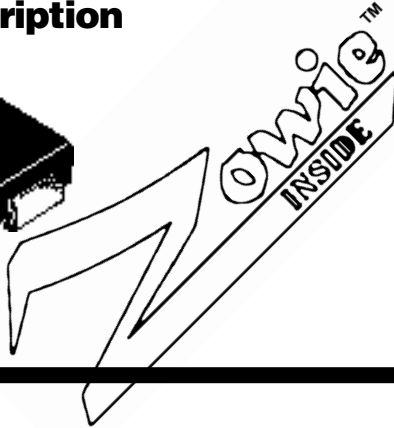


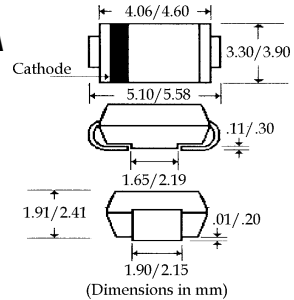
# 2.0 Amp Glass Passivated Sintered Rectifiers

## Mechanical Dimensions

GFZ20A . . . 20M Series



DO-214AA  
(SMB)

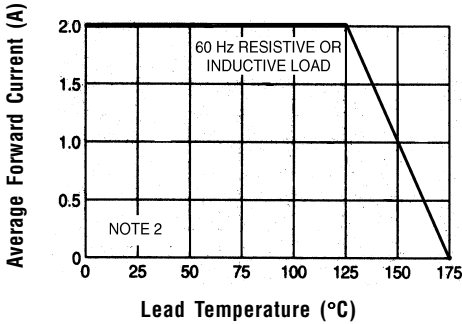


### Features

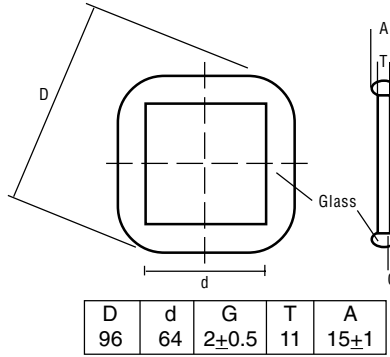
- **LOWEST COST FOR GLASS SINTERED CONSTRUCTION**
- **LOWEST  $V_F$  FOR GLASS SINTERED CONSTRUCTION**
- **TYPICAL  $I_r < 100$  nAmps**
- **2.0 AMP OPERATION @  $T_A = 125^\circ\text{C}$ , WITH NO THERMAL RUNAWAY**
- **SINTERED GLASS CAVITY-FREE JUNCTION**

	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
Operating & Storage Temperature Range... $T_J, T_{STRG}$	-65 to 175							$^\circ\text{C}$
<b>Electrical Characteristics</b>								
Maximum Forward Voltage @ 2.0A... $V_F$	< ..... 1.1 ..... > < ..... 1.2 ..... >							Volts
Maximum Full Load Reverse Current... $I_r(av)$ Full Cycle Average @ $T_A = 55^\circ\text{C}$	100							$\mu\text{Amps}$
Maximum DC Reverse Current... $I_{R(max)}$ $T_A = 25^\circ\text{C}$ @ Rated DC Blocking Voltage $T_A = 150^\circ\text{C}$	5.0 100							$\mu\text{Amps}$
Typical Junction Capacitance... $C_j$ (Note 1)	20							pF
Typical Thermal Resistance... $R_{\theta JA}$ (Note 2)	16							$^\circ\text{C/W}$
Typical Reverse Recovery Time... $t_{RR}$ (Note 3)	2.5							$\mu\text{s}$

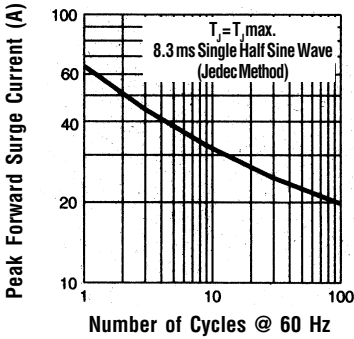
**Forward Current Derating Curve**



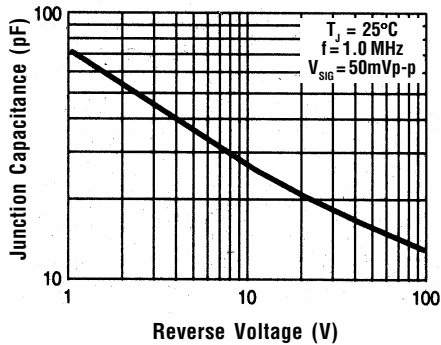
**Die Dimension (mils)**



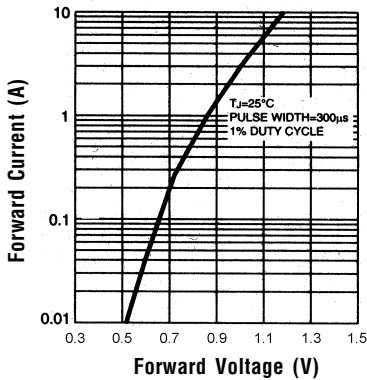
**Non-Repetitive Peak Forward Surge Current**



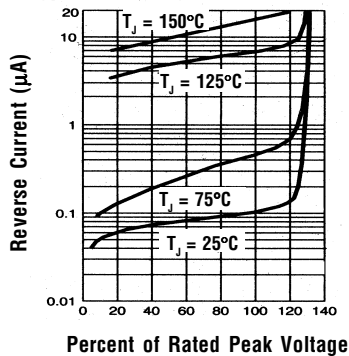
**Typical Junction Capacitance**



**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<sub>F</sub> = 0.5A, I<sub>R</sub> = 1.0A, I<sub>RR</sub> = 0.25A.