

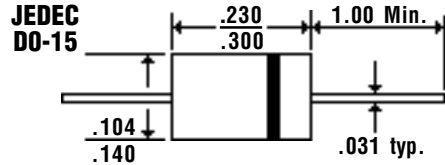
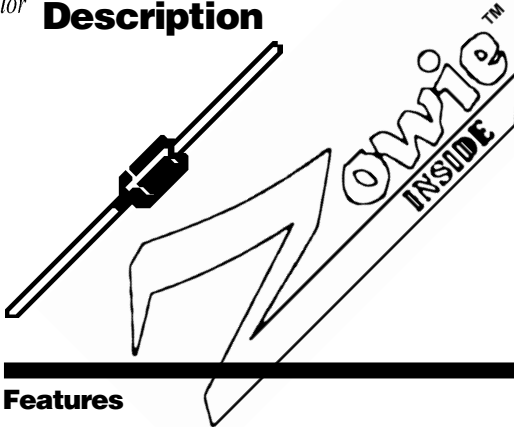


# 2.0 Amp Glass Passivated Sintered Rectifiers

## Description

## Mechanical Dimensions

**GPZ20A . . . 20M Series**

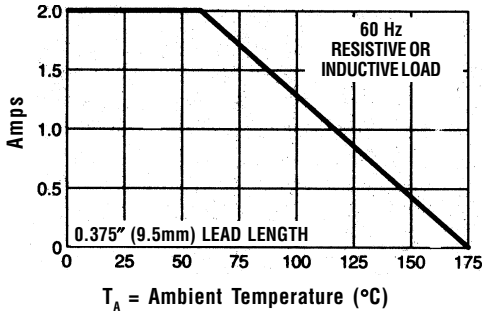


### Features

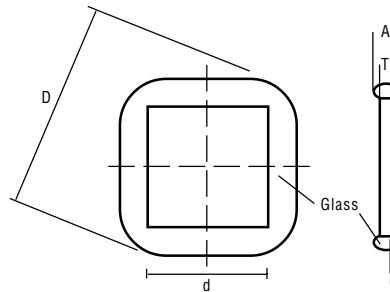
- **LOWEST COST FOR GLASS SINTERED CONSTRUCTION**
- **LOWEST  $V_f$  FOR GLASS SINTERED CONSTRUCTION**
- **TYPICAL  $I_r < 100$  nAmps**
- **2.0 AMP OPERATION @  $T_A = 55^\circ\text{C}$ , WITH NO THERMAL RUNAWAY**
- **SINTERED GLASS CAVITY-FREE JUNCTION**

Electrical Characteristics @ 25°C.	GPZ20A . . . 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... $I_{F(av)}$ Current 3/8" Lead Length @ $T_A = 55^\circ\text{C}$	..... 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 .... >		< ..... 1.0 .....					>	Volts
Full Load Reverse Current... $I_r(av)$ Full Cycle Average @ $T_A = 55^\circ\text{C}$	..... 100 .....							$\mu$ Amps	
DC Reverse Current... $I_{R(max)}$ @ Rated DC Blocking Voltage $T_A = 25^\circ\text{C}$	..... 5.0 .....							$\mu$ Amps	
Typical Junction Capacitance... $C_j$ (Note 1)	..... 20 .....							pF	
Typical Thermal Resistance... $R_{\theta JA}$ (Note 2)	..... 16 .....							$^\circ\text{C}/\text{W}$	
Typical Reverse Recovery Time... $t_{RR}$ (Note 3)	..... 2.5 .....							$\mu\text{s}$	
Operating & Storage Temperature Range... $T_J, T_{STRG}$	..... -65 to 175 .....							$^\circ\text{C}$	

**Forward Current Derating Curve**

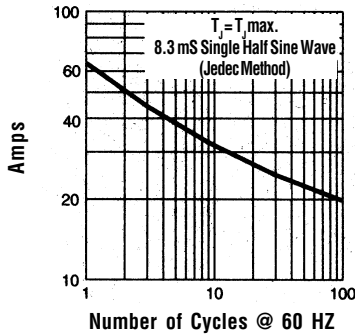


**Die Dimension (mils)**

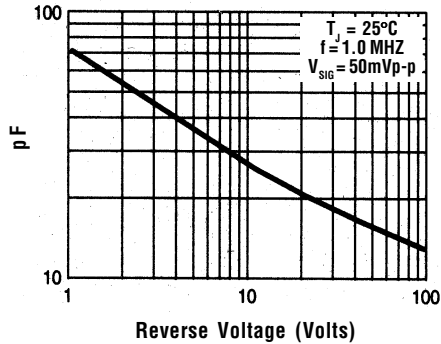


D	d	G	T	A
96	64	2±0.5	11	15±1

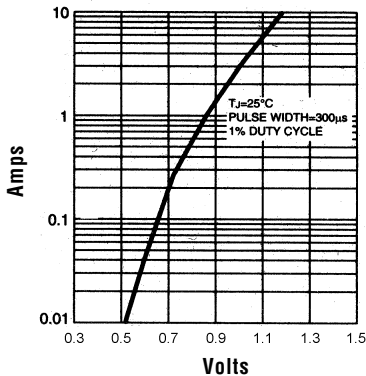
**Non-Repetitive Peak Forward Surge Current**



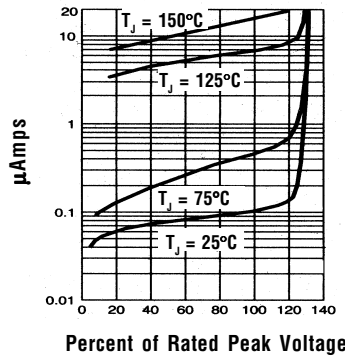
**Typical Junction Capacitance**



**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. Thermal Resistance from Junction to Ambient at 3/8" Lead Length, P.C. Board Mounted.
  3. Reverse Recovery Condition I<sub>F</sub> = 0.5A, I<sub>R</sub> = 1.0A, I<sub>RR</sub> = 0.25A.