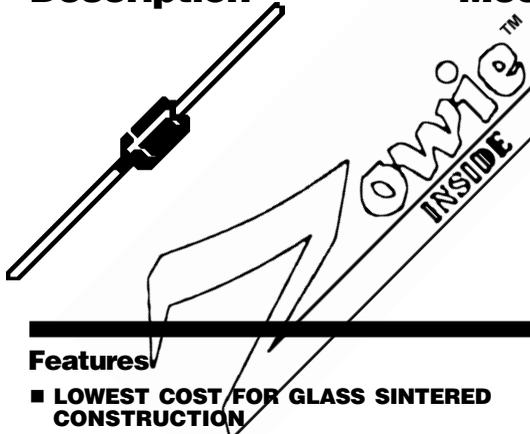


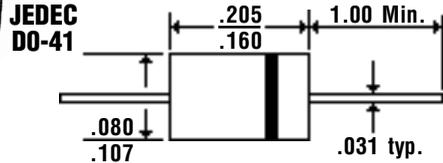
# 1.0 Amp Glass Passivated Sintered Rectifiers

**GPZ10A . . . 10Q Series**

## Description



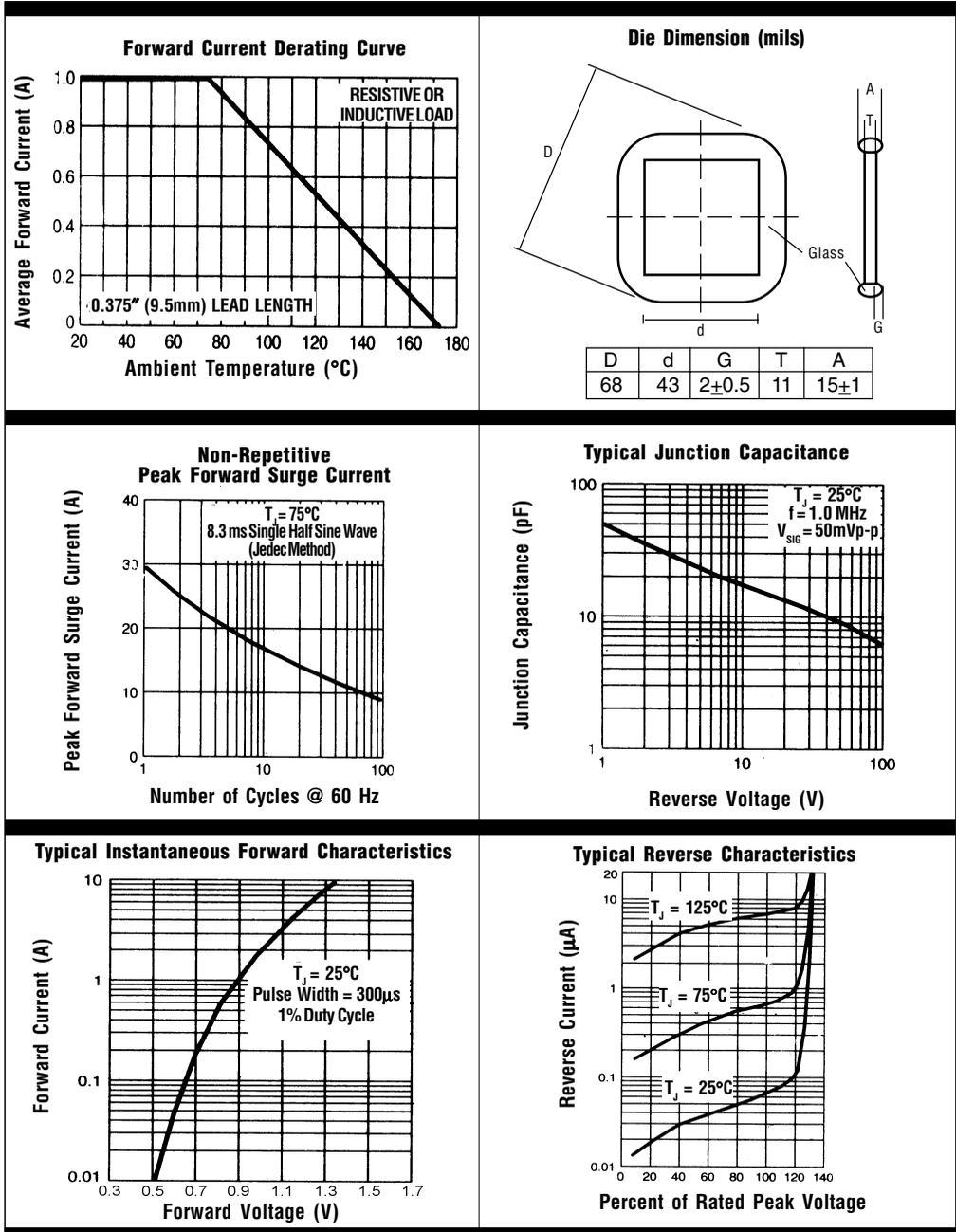
## Mechanical Dimensions



### Features

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

GPZ10A . . . 10Q Series								Units		
Maximum Ratings	10A	10B	10D	10G	10J	10K	10M	10N	10Q	
Peak Repetitive Reverse Voltage... $V_{RRM}$	50	100	200	400	600	800	1000	1100	1200	Volts
RMS Reverse Voltage... $V_{R(rms)}$	35	70	140	280	420	560	700	770	840	Volts
DC Blocking Voltage... $V_{DC}$	50	100	200	400	600	800	1000	1100	1200	Volts
Average Forward Rectified Current... $I_{F(av)}$ 3/8" Lead Length @ $T_A = 55^\circ\text{C}$						1.0				Amps
Non-Repetitive Peak Forward Surge Current... $I_{FSM}$ 1/2 Sine Wave Superimposed on Rated Load						30				Amps
Operating & Storage Temperature Range... $T_J, T_{STRG}$						-65 to 175				$^\circ\text{C}$
<b>Electrical Characteristics</b>										
Maximum Forward Voltage @ 1.0A... $V_F$	< ..... 1.1 ..... >					< ..... 1.2 ..... >				Volts
Maximum Full Load Reverse Current... $I_R(av)$ Full Cycle Average @ $T_A = 75^\circ\text{C}$						30				$\mu\text{Amps}$
Maximum DC Reverse Current... $I_{R(max)}$ @ Rated DC Blocking Voltage						$T_A = 25^\circ\text{C}$ ..... 5.0 .....				$\mu\text{Amps}$
						$T_A = 150^\circ\text{C}$ ..... 100 .....				$\mu\text{Amps}$
Typical Junction Capacitance... $C_J$ (Note 1)	< ..... 8.0 ..... >					< ..... 7.0 ..... >				pF
Typical Thermal Resistance... $R_{\theta JA}$ (Note 2)						45				$^\circ\text{C/W}$
Typical Reverse Recovery Time... $t_{RR}$ (Note 3)						2.0				$\mu\text{s}$



**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  $I_F = 0.5\text{A}$ ,  $I_R = 1.0\text{A}$ ,  $I_{RR} = 0.25\text{A}$ .

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%.