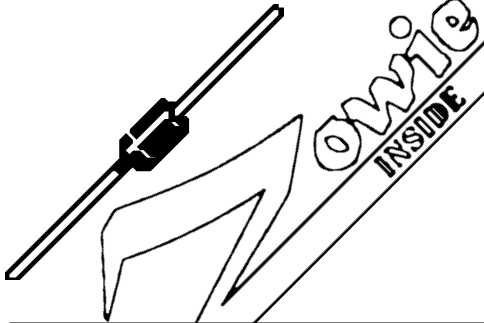




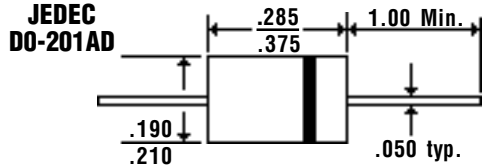
Description

3.0 Amp Glass Passivated Sintered Fast Switching Rectifiers

RGPZ30A . . . 30M Series



Mechanical Dimensions



Features

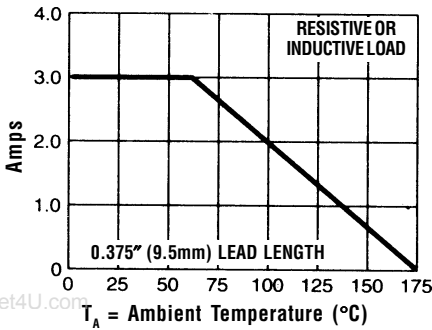
- **LOWEST COST FOR GLASS SINTERED FAST SWITCHING CONSTRUCTION**
- **LOWEST  $V_F$  FOR GLASS SINTERED FAST SWITCHING CONSTRUCTION**
- **TYPICAL  $I_R < 100$  nAmps**
- **3.0 AMP OPERATION @  $T_A = 55^\circ\text{C}$ , WITH NO THERMAL RUNAWAY**
- **SINTERED GLASS CAVITY-FREE JUNCTION**

Electrical Characteristics @ 25°C.	RGPZ30A . . . 30M Series							Units	
Maximum Ratings	30A	30B	30D	30G	30J	30K	30M		
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 @ $T_A = 55^\circ\text{C}$					3.0			Amps	
Non-Repetitive Peak Forward Surge Current... $I_{FSM}$ 8.3mS, 1/2 Sine Wave Superimposed on Rated Load					125			Amps	
Forward Voltage @ Rated Forward Current and 25°C... $V_F$					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					5.0			μAmps	
					200			μAmps	
Typical Junction Capacitance... $C_J$ (Note 1)					60			pF	
Maximum Thermal Resistance... $R_{\theta JA}$ (Note 2)					16			°C/W	
Maximum Reverse Recovery Time... $t_{RR}$ (Note 3)	< ..... 150		> 250		< ..... 500		>		nS
Operating & Storage Temperature Range... $T_J, T_{STRG}$	-65 to 175							°C	

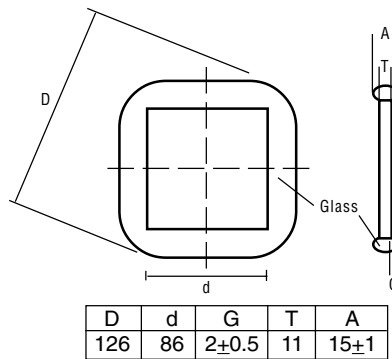
# 3.0 Amp Glass Passivated Sintered Fast Switching Rectifiers

**RGPZ30A . . . 30M Series**

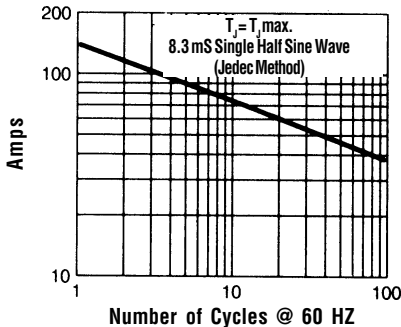
**Forward Current Derating Curve**



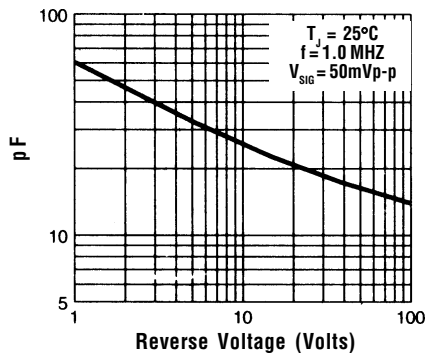
**Die Dimension (mils)**



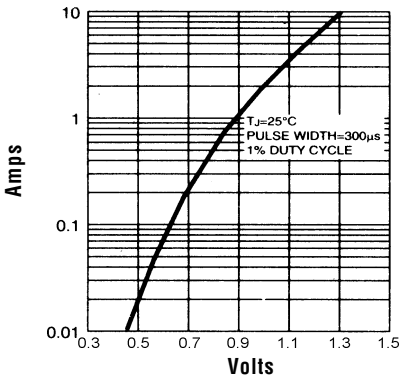
**Non-Repetitive Peak Forward Surge Current**



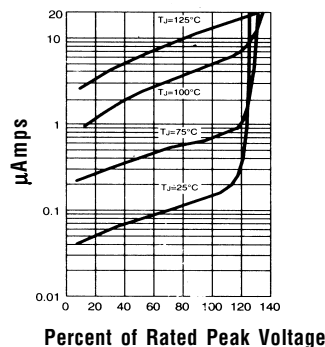
**Typical Junction Capacitance**



**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. Thermal Resistance from Junction to Ambient at 3/8" Lead Length, P.C. Board Mounted.
  3. Reverse Recovery Condition  $I_F = 0.5$ A,  $I_R = 1.0$ A,  $I_{RR} = 0.25$ A.