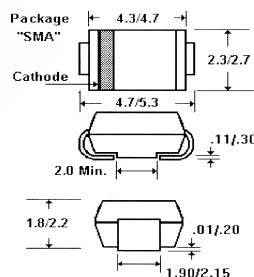
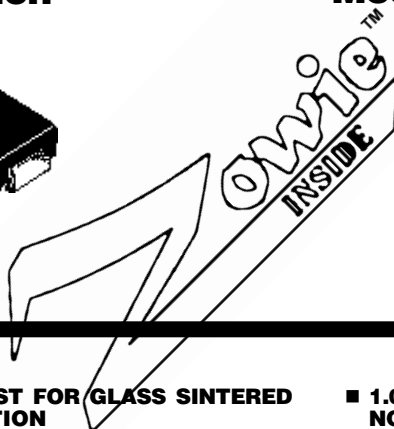


1.0 Amp Glass Passivated Sintered Rectifiers

Description

Mechanical Dimensions

GFZ1A...1Q Series



Features

- **LOWEST COST FOR GLASS SINTERED CONSTRUCTION**
- **LOWEST V_F FOR GLASS SINTERED CONSTRUCTION**
- **TYPICAL $I_o < 100$ nAmps**
- **1.0 AMP OPERATION @ $T_A = 135^\circ\text{C}$, WITH NO THERMAL RUNAWAY**
- **SINTERED GLASS CAVITY-FREE JUNCTION**

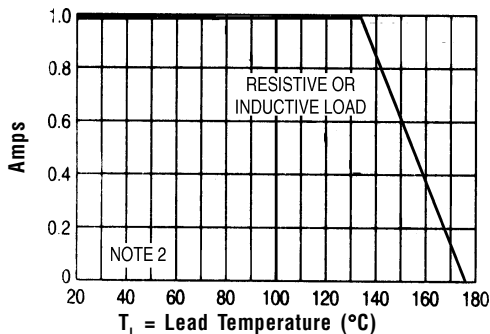
Electrical Characteristics @ 25°C.				GFZ1A . . . 1Q Series									Units
Maximum Ratings				1A	1B	1D	1G	1J	1K	1M	1N	1Q	
Peak Repetitive Reverse Voltage...V _{RRM}				50	100	200	400	600	800	1000	1100	1200	Volts
RMS Reverse Voltage...V _{R(rms)}				35	70	140	280	420	560	700	770	840	Volts
DC Blocking Voltage...V _{DC}				50	100	200	400	600	800	1000	1100	1200	Volts
Average Forward Rectified Current...I _{F(av)} @ T _A = 135°C (Note 2)				1.0								Amps	
Non-Repetitive Peak Forward Surge Current...I _{FSM} ½ Sine Wave Superimposed on Rated Load				30								Amps	
Forward Voltage @ 1.0A...V _F				<		1.0		 >		< . 1.1 . >		Volts	
Full Load Reverse Current...I _R (av) Full Cycle Average @ T _A = 135°C				30								μAmps	
DC Reverse Current...I _{R(max)} @ Rated DC Blocking Voltage				T _A = 25°C		5.0						μAmps	
				T _A = 150°C		200						μAmps	
Typical Junction Capacitance...C _J (Note 1)				<		8.0		 >		< 7.0 >		pF	
Typical Thermal Resistance...R _{θJA} (Note 2)				45								°C/W	
Typical Reverse Recovery Time...t _{RR} (Note 3)				2.0								μS	
Operating & Storage Temperature Range...T _J , T _{STRG}				-65 to 175								°C	



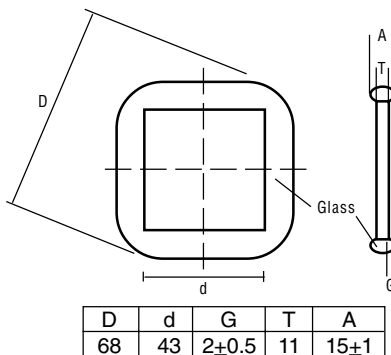
1.0 Amp Glass Passivated Sintered Rectifiers

GFZ1A ... 1Q Series

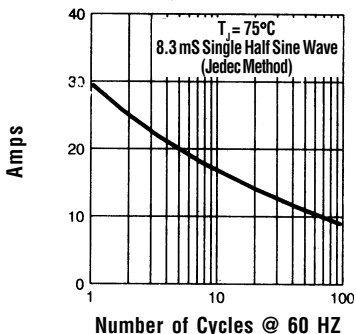
Forward Current Derating Curve



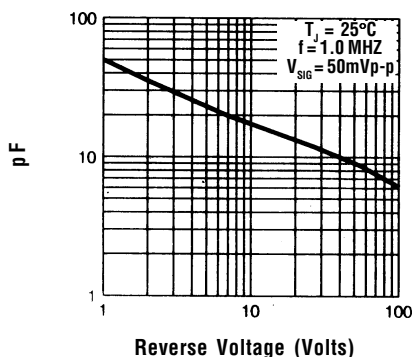
Die Dimension (mils)



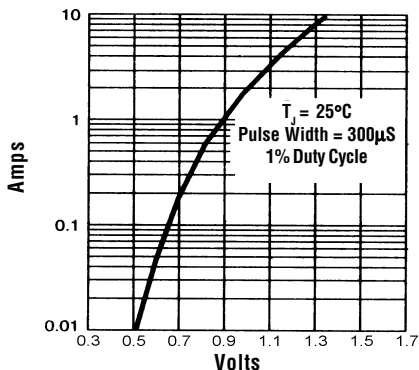
Non-Repetitive Peak Forward Surge Current



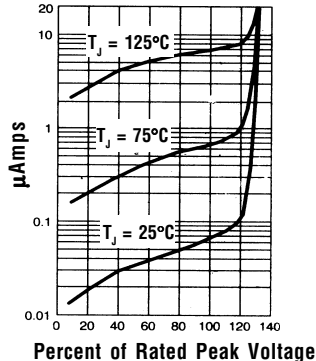
Typical Junction Capacitance



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. 5.0mm² (.013mm thick) land areas.
 3. Reverse Recovery Condition $I_F = 0.5\text{A}$, $I_R = 1.0\text{A}$, $I_{RR} = 0.25\text{A}$.