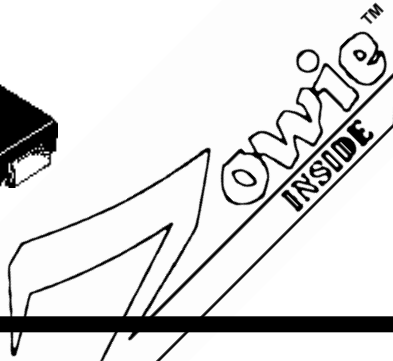




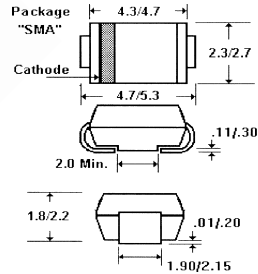
1.0 Amp Glass Passivated Sintered Rectifiers

GFZ1A . . . 1Q Series

Description



Mechanical Dimensions



Features

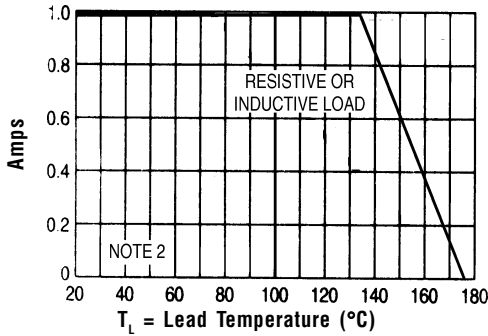
- **LOWEST COST FOR GLASS SINTERED CONSTRUCTION**
- **LOWEST V_F FOR GLASS SINTERED CONSTRUCTION**
- **TYPICAL $I_R < 100$ nAmps**
- **1.0 AMP OPERATION @ $T_A = 135^\circ\text{C}$, WITH NO THERMAL RUNAWAY**
- **SINTERED GLASS CAVITY-FREE JUNCTION**

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... $I_{F(av)}$ @ $T_A = 135^\circ\text{C}$ (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 @ $T_A = 135^\circ\text{C}$	.....					30	.....				µAmps
DC Reverse Current... $I_{R(max)}$ @ Rated DC Blocking Voltage			$T_A = 25^\circ\text{C}$		.....		5.0	.....			µAmps
			$T_A = 150^\circ\text{C}$		.....		200	.....			µAmps
Typical Junction Capacitance... C_J (Note 1)	<			8.0	..... >			< .... 7.0 >			pF
Typical Thermal Resistance... $R_{\theta JA}$ (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

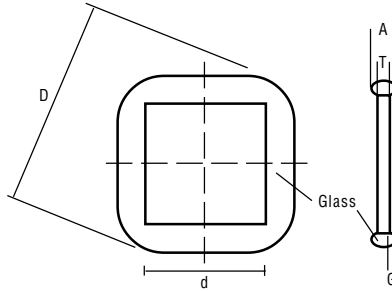
1.0 Amp Glass Passivated Sintered Rectifiers

GFZ1A... 1Q Series

Forward Current Derating Curve

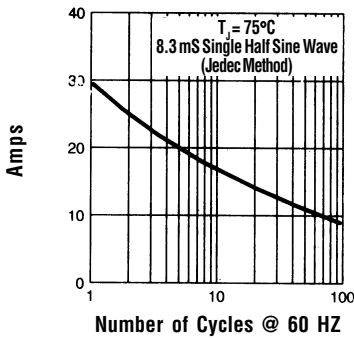


Die Dimension (mils)

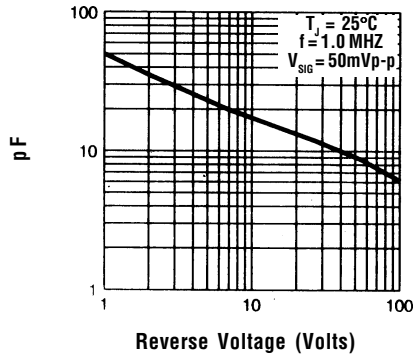


D	d	G	T	A
68	43	2±0.5	11	15±1

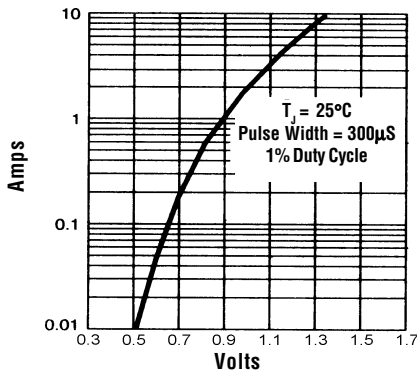
Non-Repetitive Peak Forward Surge Current



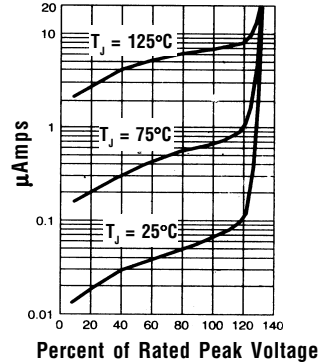
Typical Junction Capacitance



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