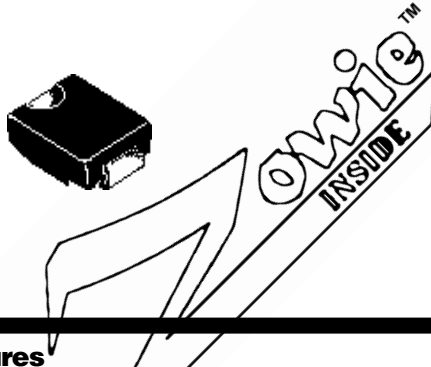


Description

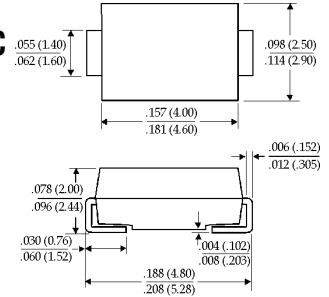
1.0 Amp Glass Passivated Sintered Rectifiers

Mechanical Dimensions

GFZ10A . . . 10Q Series



DO-214AC (SMA)



Dimensions in inches and (millimeters)

Features

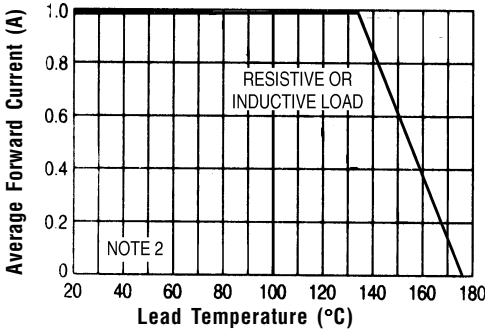
- **LOWEST COST FOR GLASS SINTERED CONSTRUCTION**
- **LOWEST V_F FOR GLASS SINTERED CONSTRUCTION**
- **TYPICAL $I_R < 100$ nAmps**
- **1.0 AMP OPERATION @ $T_A = 135^\circ\text{C}$, WITH NO THERMAL RUNAWAY**
- **SINTERED GLASS CAVITY-FREE JUNCTION**

GFZ10A . . . 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... $I_{F(av)}$ @ $T_A = 135^\circ\text{C}$ (Note 2)	..... 1.0									Amps
Non-Repetitive Peak Forward Surge Current... I_{FSM} ½ Sine Wave Superimposed on Rated Load	.....				30	.....				Amps
Operating & Storage Temperature Range... T_J, T_{STRG}	..... -65 to 175									$^\circ\text{C}$
Electrical Characteristics											
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	.....				μAmps
Maximum DC Reverse Current... $I_{R(max)}$ @ Rated DC Blocking Voltage	.....				$T_A = 25^\circ\text{C}$	5.0				μAmps
	.....				$T_A = 150^\circ\text{C}$	100				μAmps
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	.....				μs

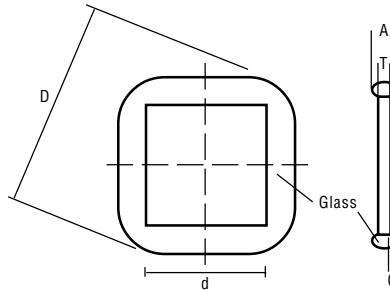
1.0 Amp Glass Passivated Sintered Rectifiers

GFZ10A . . . 10Q Series

Forward Current Derating Curve

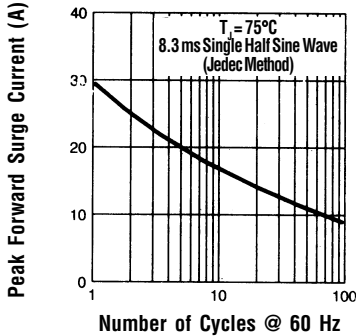


Die Dimension (mils)

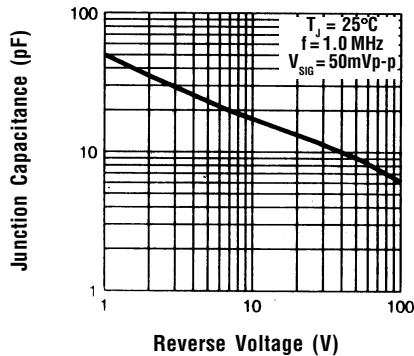


D	d	G	T	A
68	43	2±0.5	11	15±1

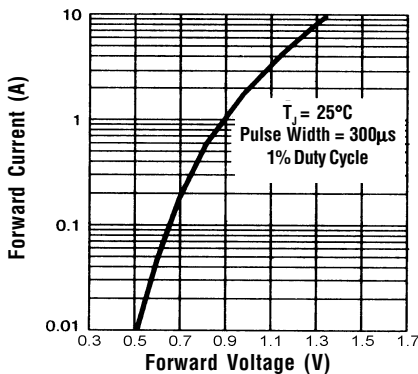
Non-Repetitive Peak Forward Surge Current



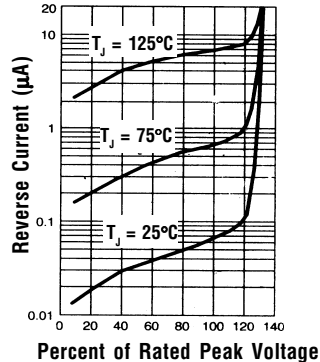
Typical Junction Capacitance



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 = 0.5A, I_R = 1.0A, I_{RR} = 0.25A.