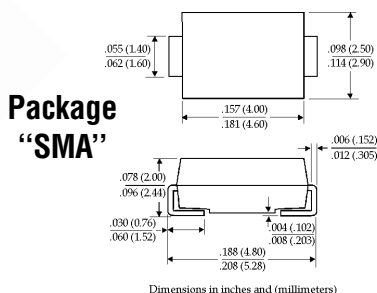
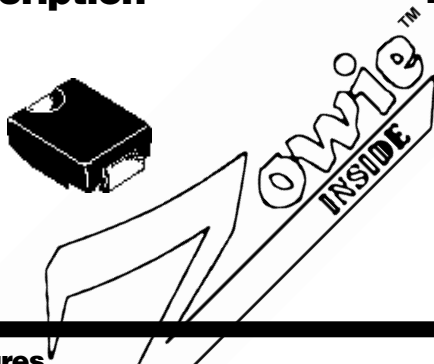




Description

1.0 Amp Glass Passivated Sintered Rectifiers

Mechanical Dimensions



Features

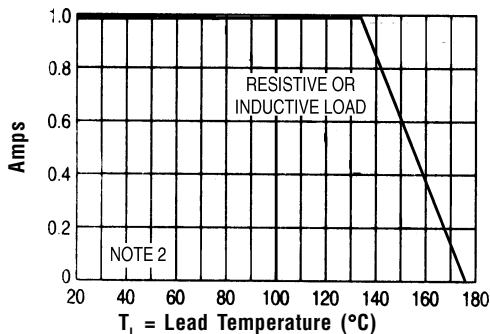
- **LOWEST COST FOR GLASS SINTERED CONSTRUCTION**
- **LOWEST V_F FOR GLASS SINTERED CONSTRUCTION**
- **TYPICAL $I_o < 100$ nAmps**
- **1.0 AMP OPERATION @ $T_A = 135^\circ\text{C}$, WITH NO THERMAL RUNAWAY**
- **SINTERED GLASS CAVITY-FREE JUNCTION**

Electrical Characteristics @ 25°C.				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... $I_{F(av)}$ @ $T_A = 135^{\circ}C$ (Note 2)	1.0									Amps
Non-Repetitive Peak Forward Surge Current... I_{FSM} $\frac{1}{2}$ Sine Wave Superimposed on Rated Load	30									Amps
Forward Voltage @ 1.0A... V_F	< 1.1		>		< 1.2		>			Volts
Full Load Reverse Current... $I_{R(av)}$ Full Cycle Average @ $T_A = 75^{\circ}C$	30									μ Amps
DC Reverse Current... $I_{R(max)}$ @ Rated DC Blocking Voltage	5.0									μ Amps
$T_A = 25^{\circ}C$	100									μ Amps
$T_A = 150^{\circ}C$										
Typical Junction Capacitance... C_J (Note 1)	< 8.0		>		< 7.0		>			pF
Typical Thermal Resistance... $R_{\theta JA}$ (Note 2)	45									$^{\circ}C/W$
Typical Reverse Recovery Time... t_{RR} (Note 3)	2.0									μ S
Operating & Storage Temperature Range... T_J, T_{STRG}	-65 to 175									$^{\circ}C$

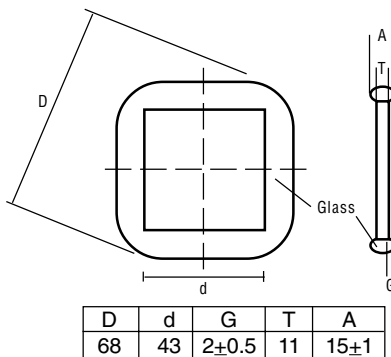
1.0 Amp Glass Passivated Sintered Rectifiers

GFZ10A ... 10Q Series

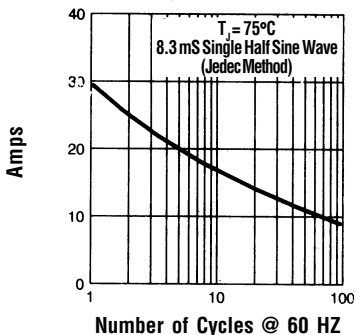
Forward Current Derating Curve



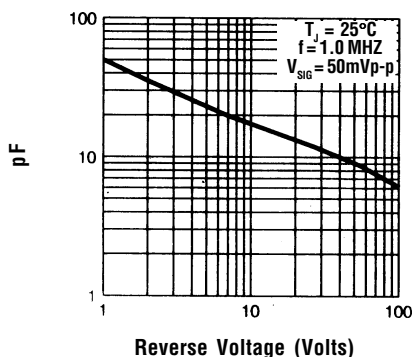
Die Dimension (mils)



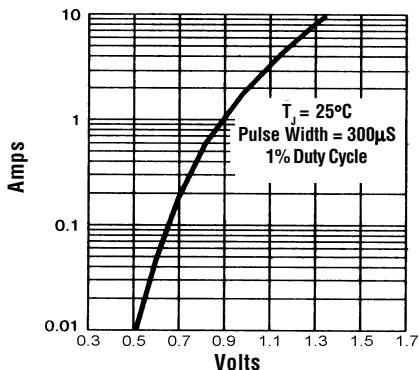
Non-Repetitive Peak Forward Surge Current



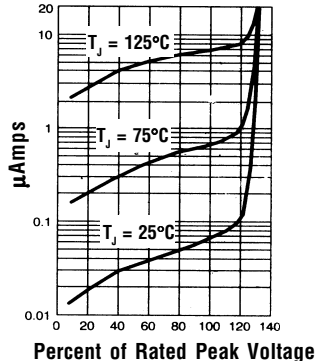
Typical Junction Capacitance



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