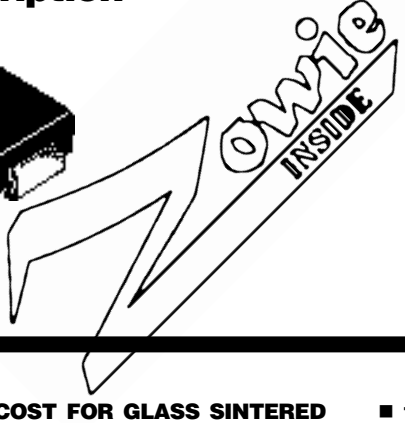
Semiconductor

Data Sheet

1.5 Amp Glass Passivated Sintered Rectifiers

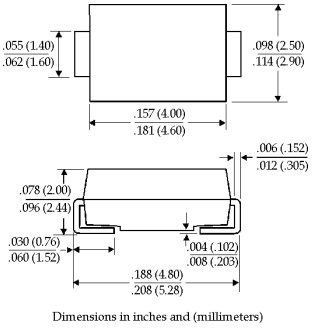
GFZ15A . . . 15M Series

Description



Mechanical Dimensions

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**
- **1.5 AMP OPERATION @ T_A = 125°C, WITH NO THERMAL RUNAWAY**
- **SINTERED GLASS CAVITY-FREE JUNCTION**

	GFZ15A . . . 15M Series							Units
Maximum Ratings	**15A**	**15B**	**15D**	**15G**	**15J**	**15K**	**15M**	
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...$I_{F(av)}$ @ T_L = 125°C *(Note 2)*	1.5							Amps
Non-Repetitive Peak Forward Surge Current...I_{FSM} 8.3ms, ½ Sine Wave Superimposed on Rated Load	50							Amps
Operating & Storage Temperature Range...T_J, T_{STRG}	-65 to 175							°C
Electrical Characteristics								
Maximum Forward Voltage @ 1.5A...V_F	< 1.1 >				< 1.2 >			Volts
Maximum Full Load Reverse Current...I_R(av) Full Cycle Average @ T_A = 55°C	100							µAmps
Maximum DC Reverse Current...$I_{R(max)}$ T_A = 25°C	5.0							µAmps
@ Rated DC Blocking Voltage T_A = 150°C	100							
Typical Junction Capacitance...C_J *(Note 1)*	15							pF
Typical Thermal Resistance...$R_{\theta JA}$ *(Note 2)*	45							°C/W
Typical Reverse Recovery Time...t_{RR} *(Note 3)*	2.0							µs

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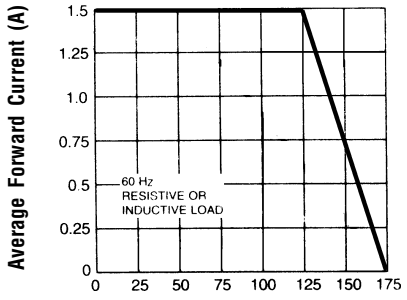
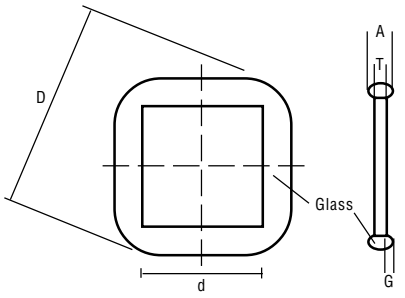
Forward Current Derating Curve

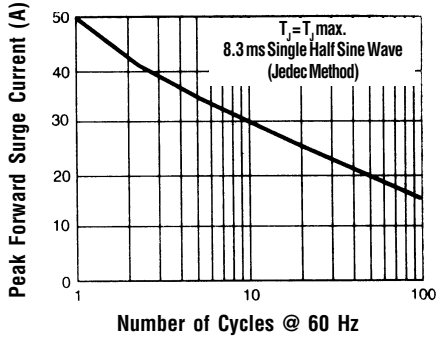


Die Dimension (mils)

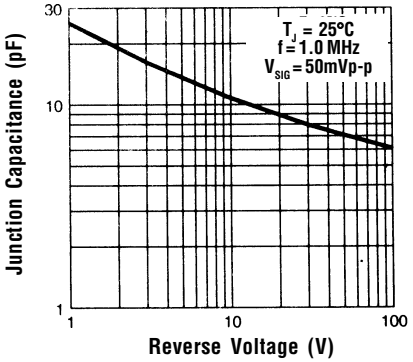


D	d	G	T	A
84	56	2±0.5	11	15±1

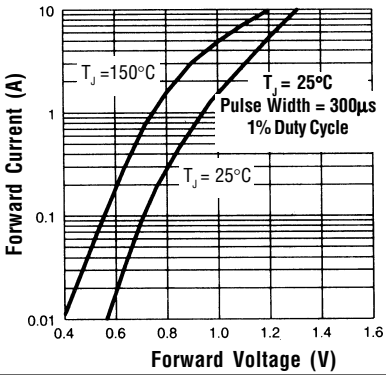
Non-Repetitive Peak Forward Surge Current



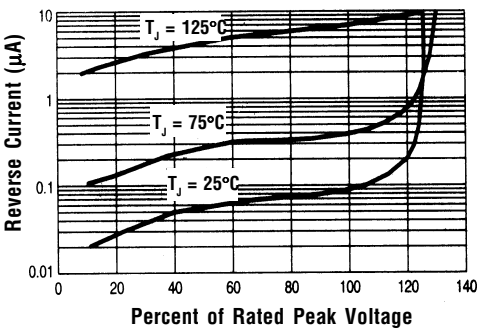
Typical Junction Capacitance



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.