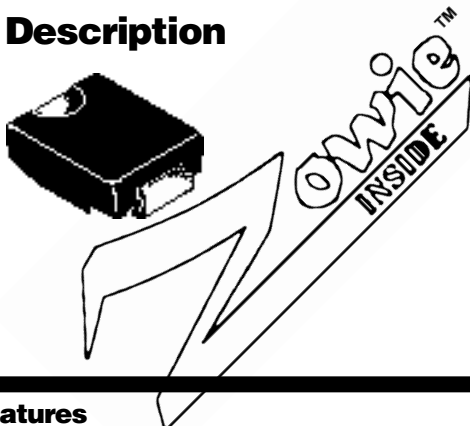


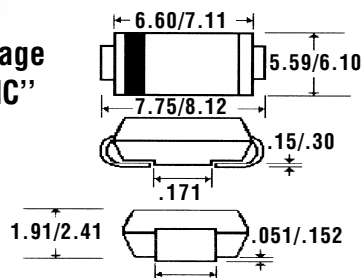


Description



3.0 Amp Glass Passivated Sintered Rectifiers

Mechanical Dimensions

Package
"SMC"

Features

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

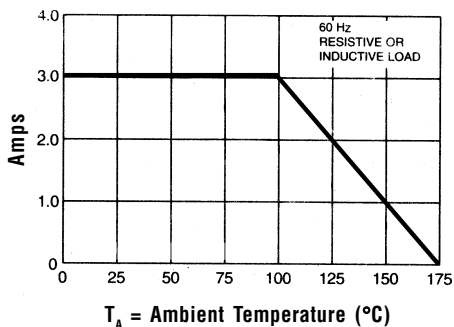
Electrical Characteristics @ 25°C.								GFZ30A . . . 30M Series	Units
Maximum Ratings	30A	30B	30D	30G	30J	30K	30M		
Peak Repetitive Reverse Voltage...V _{RRM}	50	100	200	400	600	800	1000	Volts	
RMS Reverse Voltage...V _{R(rms)}	35	70	140	280	420	560	700	Volts	
DC Blocking Voltage...V _{DC}	50	100	200	400	600	800	1000	Volts	
Average Forward Rectified Current...I _{F(av)} Current 3/8" Lead Length @ T _A = 100°C				3.0				Amps	
Non-Repetitive Peak Forward Surge Current...I _{FSM} 8.3mS, ½ Sine Wave Superimposed on Rated Load				125				Amps	
Forward Voltage @ 3.0A...V _F	< 1.1 >			< 1.2 >			Volts		
Full Load Reverse Current...I _R (av) Full Cycle Average @ T _A = 55°C				100				μAmps	
DC Reverse Current...I _{R(max)} @ Rated DC Blocking Voltage	T _A = 25°C T _A = 150°C			5.0 100				μAmps	
Typical Junction Capacitance...C _j (Note 1)				40				pF	
Typical Thermal Resistance...R _{θJA} (Note 2)				15				°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	



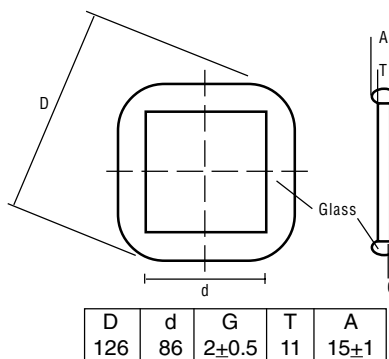
3.0 Amp Glass Passivated Sintered Rectifiers

GFZ30A . . . 30M Series

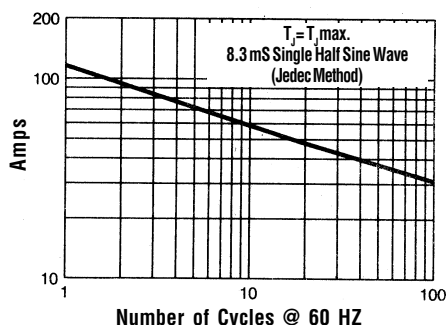
Forward Current Derating Curve



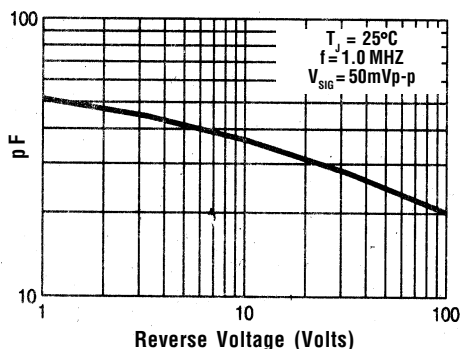
Die Dimension (mils)



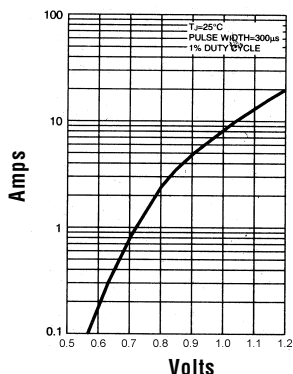
Non-Repetitive Peak Forward Surge Current



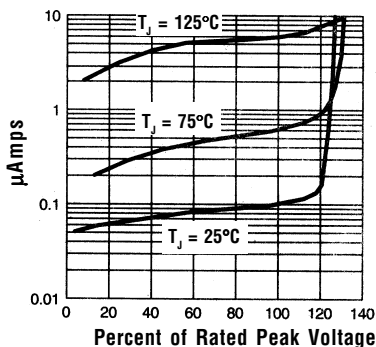
Typical Junction Capacitance



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