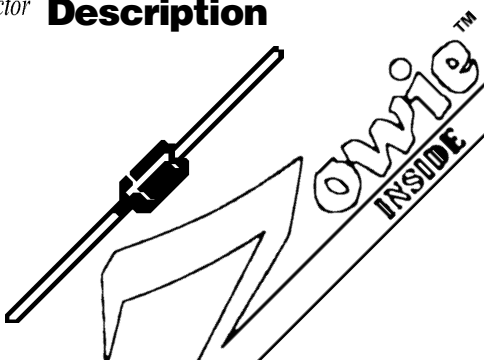




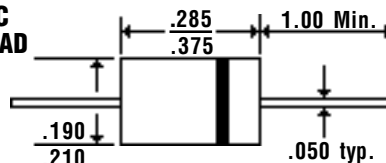
## Description

3.0 Amp Glass Passivated  
Sintered Fast Efficient  
Rectifiers

EGPZ30A . . . 30M Series



## Mechanical Dimensions

JEDEC  
DO-201AD

## Features

- LOWEST COST FOR GLASS SINTERED FAST EFFICIENT CONSTRUCTION
- LOWEST  $V_F$  FOR GLASS SINTERED FAST EFFICIENT CONSTRUCTION
- TYPICAL  $I_R < 100$  nAmps
- 3.0 AMP OPERATION @  $T_A = 55^\circ\text{C}$ , WITH NO THERMAL RUNAWAY
- SINTERED GLASS CAVITY-FREE JUNCTION

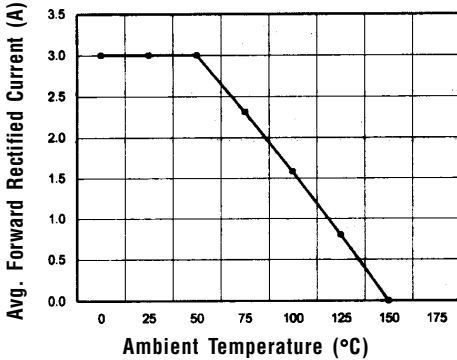
Electrical Characteristics @ 25°C.		EGPZ30A . . . 30M Series							Units
Maximum Ratings		30A	30B	30D	30G	30J	30K	30M	
Peak Repetitive Reverse Voltage...V <sub>RRM</sub>		50	100	200	400	600	800	1000	Volts
RMS Reverse Voltage...V <sub>R(rms)</sub>		35	70	140	280	420	560	700	Volts
DC Blocking Voltage...V <sub>DC</sub>		50	100	200	400	600	800	1000	Volts
Average Forward Rectified Current...I <sub>F(av)</sub> Current 3/8" Lead Length @ T <sub>A</sub> = 55°C		..... 3.0 .....							Amps
Non-Repetitive Peak Forward Surge Current...I <sub>FSM</sub> 8.3mS, ½ Sine Wave Superimposed on Rated Load		..... 125 .....							Amps
Forward Voltage @ Rated Forward Current and 25°C...V <sub>F</sub>		< ..... 1.0 .....	>	1.3	< ..... 1.7 .....	>			Volts
DC Reverse Current...I <sub>R(max)</sub> @ Rated DC Blocking Voltage	T <sub>A</sub> = 25°C	..... 5.0 .....							μAmps
	T <sub>A</sub> = 125°C	..... 100 .....							μAmps
Typical Junction Capacitance...C <sub>J</sub> (Note 1)		..... 60 .....							pF
Maximum Thermal Resistance...R <sub>θJA</sub> (Note 2)		..... 16 .....							°C/W
Maximum Reverse Recovery Time...t <sub>RR</sub> (Note 3)		< ..... 50 .....		>	< ..... 75 .....		>		nS
Operating & Storage Temperature Range...T <sub>J</sub> , T <sub>STRG</sub>		..... -65 to 150 .....							°C



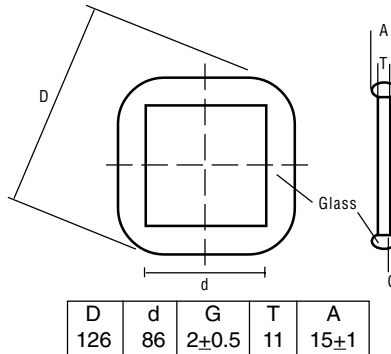
# 3.0 Amp Glass Passivated Sintered Fast Efficient Rectifiers

**EGPZ30A . . . 30M Series**

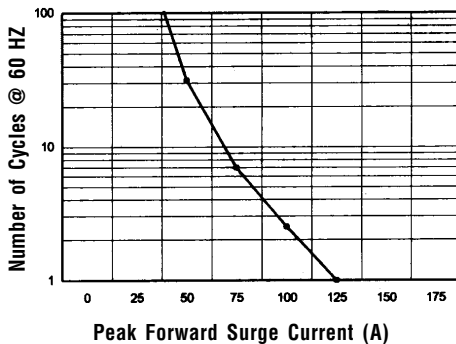
**Forward Current Derating Curve**



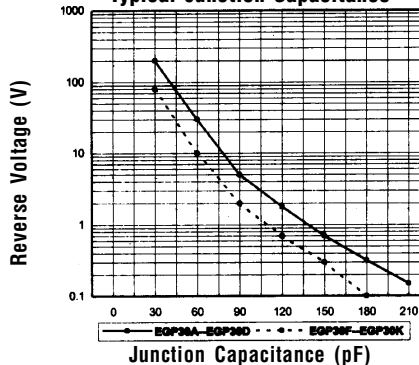
**Die Dimension (mils)**



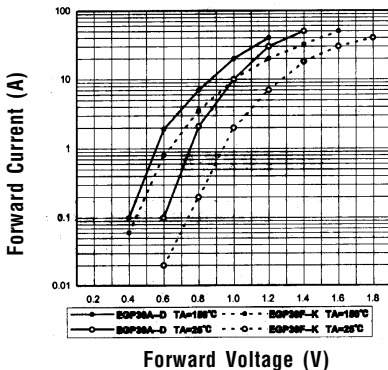
**Non-Repetitive Peak Forward Surge Current**



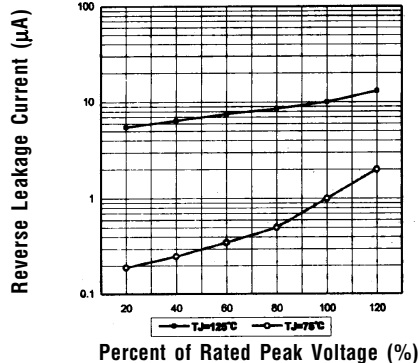
**Typical Junction Capacitance**



**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. Thermal Resistance from Junction to Ambient at 3/8" Lead Length, P.C. Board Mounted.
  3. Reverse Recovery Condition  $I_F = 0.5A$ ,  $I_R = 1.0A$ ,  $I_{RR} = 0.25A$ .