

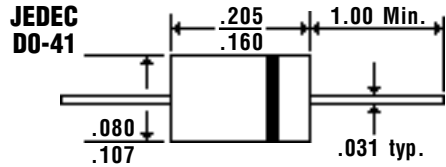
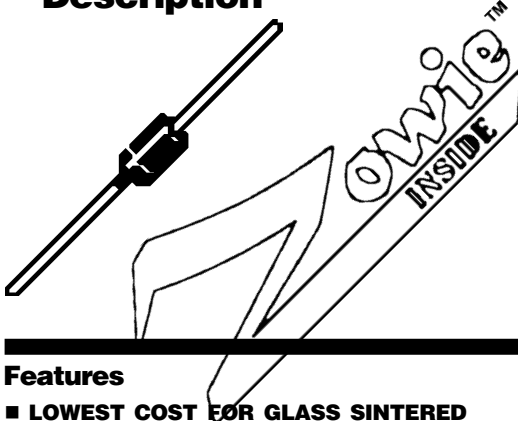


1.0 Amp Glass Passivated Sintered Fast Efficient Rectifiers

Description

Mechanical Dimensions

EGPZ10A . . . 10K Series



Features

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

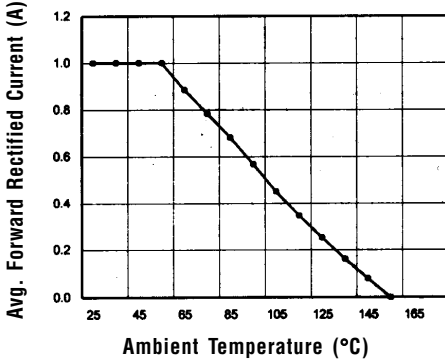
| Electrical Characteristics @ 25°C. | EGPZ10A . . . 10K Series | | | | | | Units |
|---|--------------------------|-----|-----|-----|---------------------|-----|--------------------|
| Maximum Ratings | 10A | 10B | 10D | 10G | 10J | 10K | |
| Peak Repetitive Reverse Voltage... V_{RRM} | 50 | 100 | 200 | 400 | 600 | 800 | Volts |
| RMS Reverse Voltage... $V_{R(rms)}$ | 35 | 70 | 140 | 280 | 420 | 560 | Volts |
| DC Blocking Voltage... V_{DC} | 50 | 100 | 200 | 400 | 600 | 800 | Volts |
| Average Forward Rectified Current... $I_{F(av)}$ Current 3/8" Lead Length @ $T_A = 55^\circ\text{C}$ | ..... |  |  | 1.0 | ..... |  | Amps |
| Non-Repetitive Peak Forward Surge Current... I_{FSM} 8.3mS, 1/2 Sine Wave Superimposed on Rated Load | ..... |  |  | 30 | ..... |  | Amps |
| Forward Voltage @ 1.0A... V_f | < 1.0 > | | 1.3 | | < 1.7 > | | Volts |
| DC Reverse Current... $I_{R(max)}$ @ Rated DC Blocking Voltage | ..... |  |  | 5.0 | ..... |  | μAmps |
|  | ..... |  |  | 100 | ..... |  | μAmps |
| Typical Junction Capacitance... C_j (Note 1) | ..... |  |  | 15 | ..... |  | pF |
| Maximum Thermal Resistance... $R_{\theta JA}$ (Note 2) | ..... |  |  | 55 | ..... |  | $^\circ\text{C/W}$ |
| Maximum Reverse Recovery Time... t_{RR} (Note 3) | < 50 > | | 75 | | < > | | nS |
| Operating & Storage Temperature Range... T_J, T_{STRG} | -65 to 150 | | | | | | $^\circ\text{C}$ |



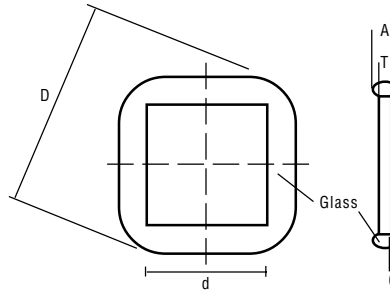
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Forward Current Derating Curve

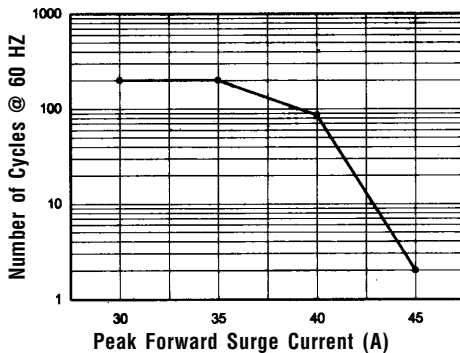


Die Dimension (mils)

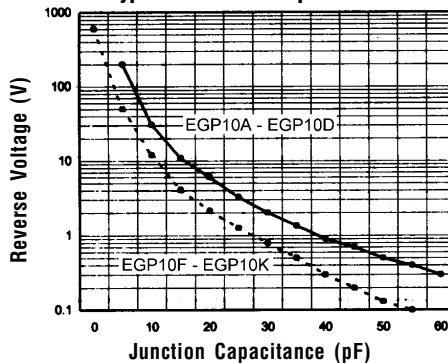


| D | d | G | T | A |
|----|----|-------|----|------|
| 68 | 43 | 2±0.5 | 11 | 15±1 |

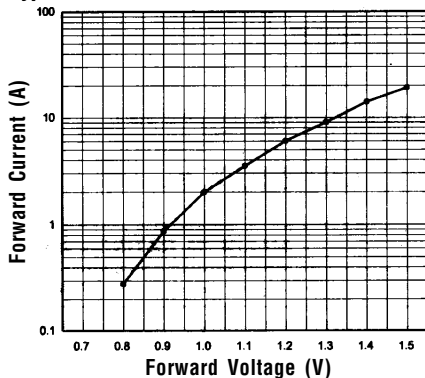
Non-Repetitive Peak Forward Surge Current



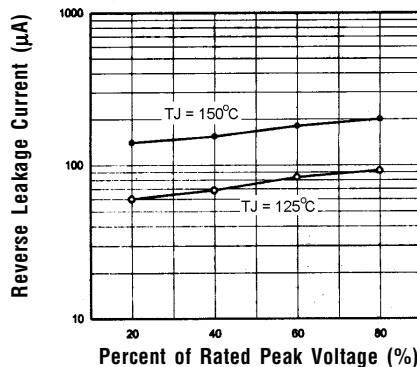
Typical Junction Capacitance



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