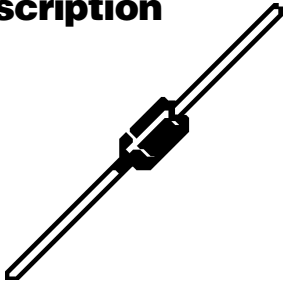
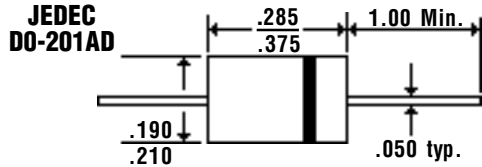


Description



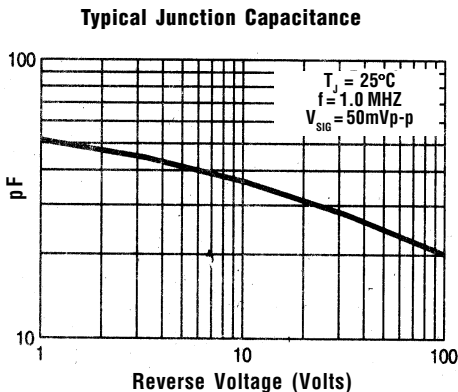
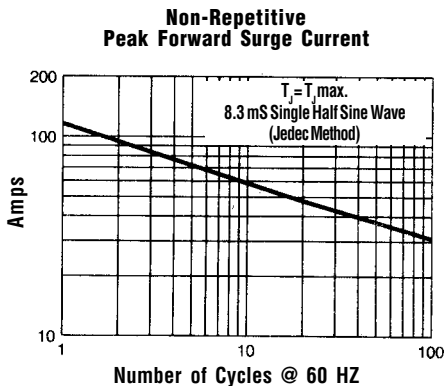
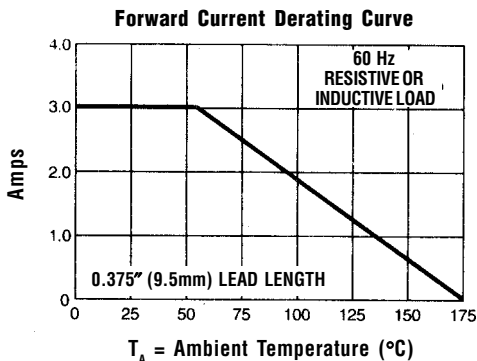
Mechanical Dimensions



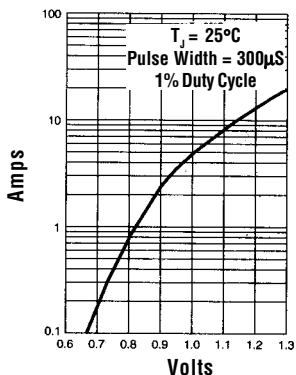
Features

- HIGH TEMPERATURE METALLURGICALLY BONDED CONSTRUCTION
- 3.0 AMP OPERATION @ $T_A = 55^\circ\text{C}$, WITH NO THERMAL RUNAWAY
- SINTERED GLASS CAVITY-FREE JUNCTION
- TYPICAL $I_R < 0.1 \mu\text{Amp}$

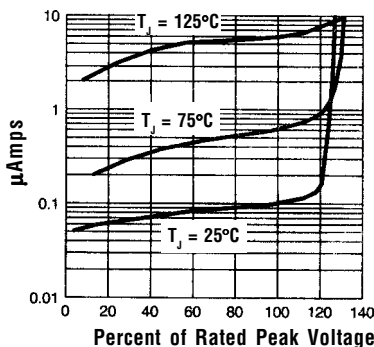
| Electrical Characteristics @ 25°C. | GP30A . . . 30M Series | | | | | | | | Units |
|---|------------------------|-------|-------|------------|-------|-------|------------------|--------------------|-------|
| Maximum Ratings | GP30A | GP30B | GP30D | GP30G | GP30J | GP30K | GP30M | | |
| Peak Repetitive 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 @ $T_A = 55^\circ\text{C}$ | | | | 3.0 | | | | Amps | |
| Non-Repetitive Peak Forward Surge Current... I_{FSM} 8.3ms, 1/2 Sine Wave Superimposed on Rated Load | | | | 125 | | | | Amps | |
| Forward Voltage @ 3.0A... V_F | < 1.2 > | | | | 1.1 | | > | | Volts |
| Full Load Reverse Current... $I_R(av)$ Full Cycle Average @ $T_A = 55^\circ\text{C}$ | | | | 100 | | | | μAmps | |
| DC Reverse Current... I_R @ Rated DC Blocking Voltage | | | | 5.0 | | | | μAmps | |
| | | | | 100 | | | | μAmps | |
| Typical Junction Capacitance... C_J (Note 1) | | | | 40 | | | | pF | |
| Typical Thermal Resistance... $R_{\theta JA}$ (Note 2) | | | | 20 | | | | $^\circ\text{C/W}$ | |
| Typical Reverse Recovery Time... t_{RR} (Note 3) | | | | 3.0 | | | | μs | |
| Operating & Storage Temperature Range... T_J, T_{STRG} | | | | -65 to 175 | | | $^\circ\text{C}$ | | |



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