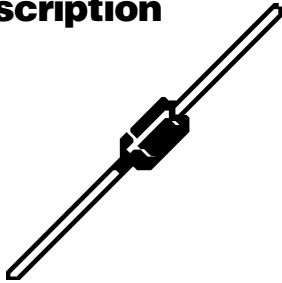
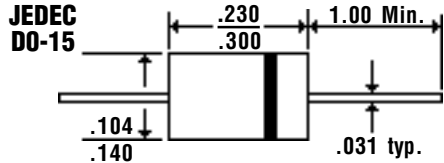


## Description



## Mechanical Dimensions

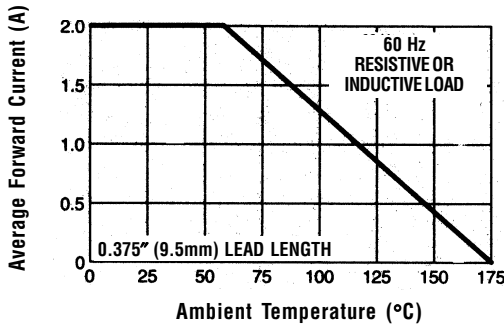


## Features

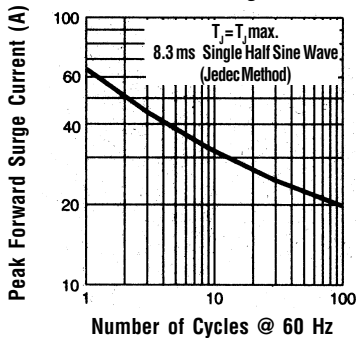
- HIGH TEMPERATURE METALLURGICALLY BONDED CONSTRUCTION
- SINTERED GLASS CAVITY-FREE JUNCTION
- 2.0 AMP OPERATION @  $T_A = 55^\circ\text{C}$ , WITH NO THERMAL RUNAWAY
- TYPICAL  $I_R < 0.1 \mu\text{Amp}$

| GP20A . . . 20J Series  |            |       |       |       |       | Units              |
|---|------------|-------|-------|-------|-------|--------------------|
| Maximum Ratings   | GP20A      | GP20B | GP20D | GP20G | GP20J |                    |
| Peak Repetitive Reverse Voltage... $V_{RRM}$  | 50         | 100   | 200   | 400   | 600   | Volts              |
| RMS Reverse Voltage... $V_{R(rms)}$   | 35         | 70    | 140   | 280   | 420   | Volts              |
| DC Blocking Voltage... $V_{DC}$   | 50         | 100   | 200   | 400   | 600   | Volts              |
| Average Forward Rectified Current... $I_{F(av)}$<br>3/8" Lead Length @ $T_A = 55^\circ\text{C}$           | 2.0        |       |       |       |       | Amps               |
| Non-Repetitive Peak Forward Surge Current... $I_{FSM}$<br>8.3ms, 1/2 Sine Wave Superimposed on Rated Load | 65         |       |       |       |       | Amps               |
| Operating & Storage Temperature Range... $T_J, T_{STRG}$  | -65 to 175 |       |       |       |       | $^\circ\text{C}$   |
| <b>Electrical Characteristics</b>   |            |       |       |       |       |                    |
| Maximum Forward Voltage @ 2.0A... $V_F$   | < 1.2 >    |       |       | 1.1   |       | Volts              |
| Maximum Full Load Reverse Current... $I_R(av)$<br>Full Cycle Average @ $T_A = 55^\circ\text{C}$           | 100        |       |       |       |       | $\mu\text{Amps}$   |
| Maximum DC Reverse Current... $I_R$<br>@ Rated DC Blocking Voltage $T_A = 25^\circ\text{C}$               | 5.0        |       |       |       |       | $\mu\text{Amps}$   |
| Typical Junction Capacitance... $C_J$ (Note 1)  | 40         |       |       |       |       | pF                 |
| Typical Thermal Resistance... $R_{\theta JA}$ (Note 2)  | 25         |       |       |       |       | $^\circ\text{C/W}$ |
| Typical Reverse Recovery Time... $t_{RR}$ (Note 3)  | 2.5        |       |       |       |       | $\mu\text{s}$      |

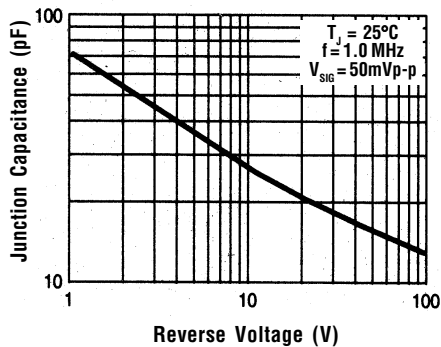
**Forward Current Derating Curve**



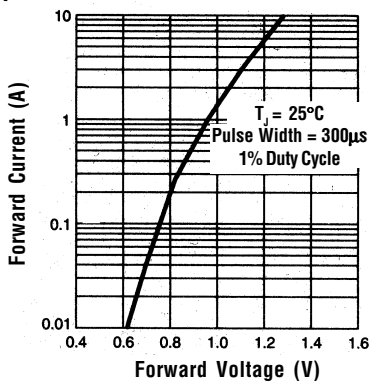
**Non-Repetitive Peak Forward Surge Current**



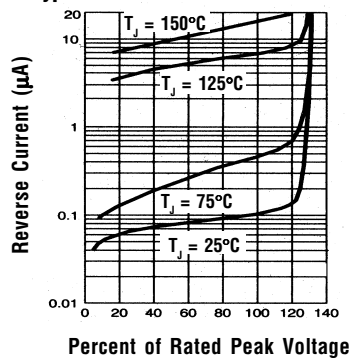
**Typical Junction Capacitance**



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