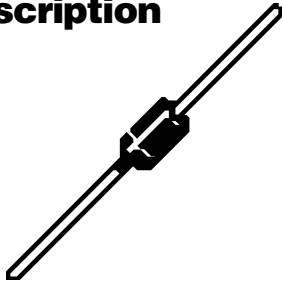
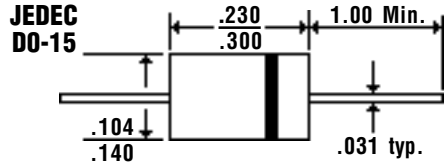


## Description



## Mechanical Dimensions

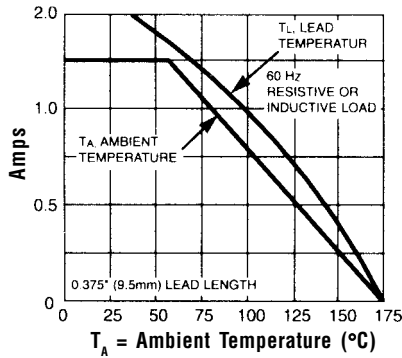


## Features

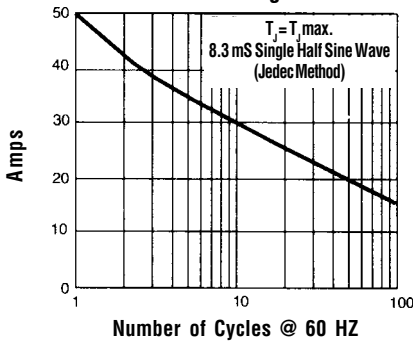
- HIGH TEMPERATURE METALLURGICALLY BONDED CONSTRUCTION
- CAPABILITY OF MEETING ENVIRONMENTAL STANDARDS OF MIL-S-19500
- SINTERED GLASS CAVITY-FREE JUNCTION

Electrical Characteristics @ 25°C.	1N5391GP . . . 99GP Series									Units
Maximum Ratings	1N5391 GP	1N5392 GP	1N5393 GP	1N5394 GP	1N5395 GP	1N5396 GP	1N5397 GP	1N5398 GP	1N5399 GP	
Peak Repetitive Reverse Voltage... $V_{RRM}$	50	100	200	300	400	500	600	800	1000	Volts
RMS Reverse Voltage... $V_{R(rms)}$	35	70	140	210	280	350	420	560	700	Volts
DC Blocking Voltage... $V_{DC}$	50	100	200	300	400	500	600	800	1000	Volts
Average Forward Rectified Current... $I_{F(av)}$ Current 3/8" Lead Length @ $T_A = 75^\circ C$	1.5									Amps
Non-Repetitive Peak Forward Surge Current... $I_{FSM}$ 8.3 mS, 1/2 Sine Wave Superimposed on Rated Load	50									Amps
Forward Voltage @ 1.5A... $V_F$	1.4									Volts
Full Load Reverse Current... $I_{R(av)}$ Full Cycle Average @ $T_A = 70^\circ C$	300									$\mu$ Amps
DC Reverse Current... $I_R$ @ Rated DC Blocking Voltage						5				$\mu$ Amps
						300				$\mu$ Amps
Typical Junction Capacitance... $C_J$ (Note 1)						15				pF
Typical Thermal Resistance... $R_{\theta JA}$ (Note 2)						45				$^\circ C/W$
Typical Reverse Recovery Time... $t_{RR}$ (Note 3)						2.0				$\mu$ S
Operating & Storage Temperature Range... $T_J, T_{STRG}$						-65 to 175				$^\circ C$

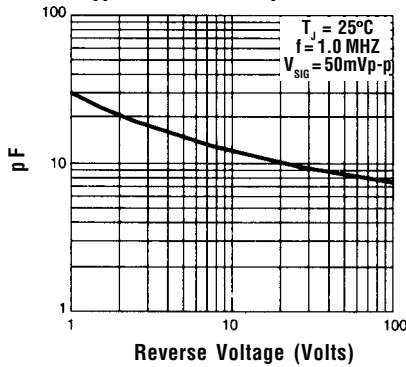
**Forward Current Derating Curve**



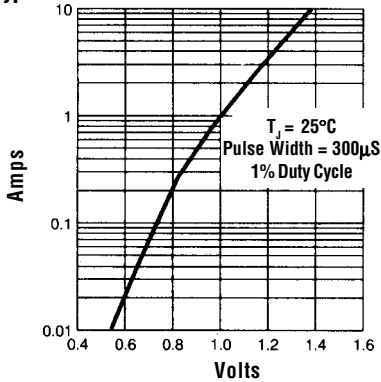
**Non-Repetitive Peak Forward Surge Current**



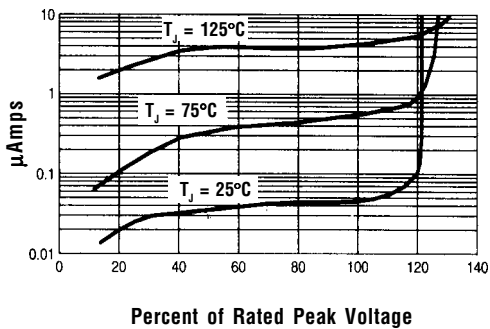
**Typical Junction Capacitance**



**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<sub>F</sub> = 0.5A, I<sub>R</sub> = 1.0A, I<sub>RR</sub> = 0.25A.