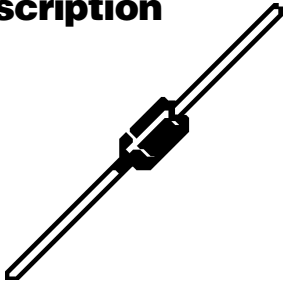
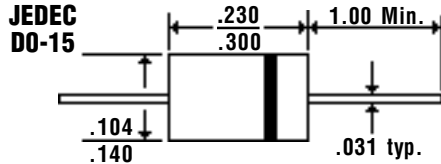


**GUF20A....20J Series**

## Description



## Mechanical Dimensions



## Features

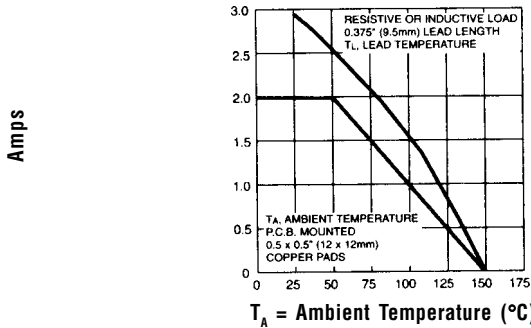
- HIGH TEMPERATURE METALLURGICALLY BONDED CONSTRUCTION
- SINTERED GLASS CAVITY-FREE JUNCTION
- 2.0 AMP OPERATION @  $T_A = 55^\circ\text{C}$ , WITH NO THERMAL RUNAWAY
- TYPICAL  $I_R < 0.2 \mu\text{Amp}$

Electrical Characteristics @ 25°C.	GUF20A . . . 20J Series						Units
Maximum Ratings	GUF 20A	GUF 20B	GUF 20D	GUF 20F	GUF 20G	GUF 20J	
Peak Repetitive Reverse Voltage... $V_{RRM}$	50	100	200	300	400	600	Volts
RMS Reverse Voltage... $V_{R(rms)}$	35	70	140	210	280	420	Volts
DC Blocking Voltage... $V_{DC}$	50	100	200	300	400	600	Volts
Average Forward Rectified Current... $I_{F(av)}$ Current 3/8" Lead Length @ $T_A = 55^\circ\text{C}$	2.0						Amps
Non-Repetitive Peak Forward Surge Current... $I_{FSM}$ 8.3mS, 1/2 Sine Wave Superimposed on Rated Load	80						Amps
Forward Voltage @ Rated Forward Current and 25°C... $V_F$	< ..... 1.1 ..... > < ..... 1.4 ..... > 1.7						Volts
Full Load Reverse Current... $I_R(av)$ Full Cycle Average @ $T_A = 55^\circ\text{C}$	100						$\mu\text{Amps}$
DC Reverse Current... $I_R$ @ Rated DC Blocking Voltage	$T_A = 25^\circ\text{C}$ ..... 10 ..... $T_A = 125^\circ\text{C}$ ..... 100 .....						$\mu\text{Amps}$ $\mu\text{Amps}$
Typical Junction Capacitance... $C_j$ (Note 1)	< ..... 40 ..... > 50						pF
Typical Thermal Resistance... $R_{\theta JA}$ (Note 2)	20						$^\circ\text{C}/\text{W}$
Typical Reverse Recovery Time... $t_{RR}$ (Note 3)	< ..... 50 ..... > 75						nS
Operating & Storage Temperature Range... $T_J, T_{STRG}$	-65 to 175						$^\circ\text{C}$

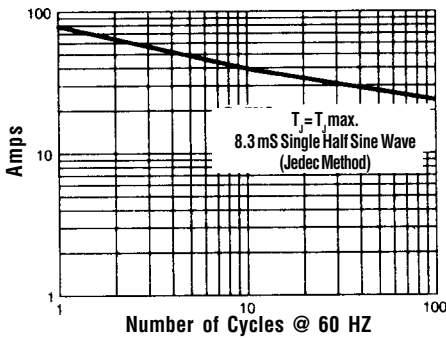
# 2.0 Amp ULTRA-FAST SWITCHING MEGARECTIFIERS

**GUF20A...20J Series**

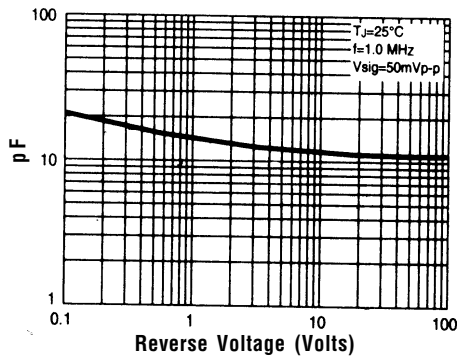
**Forward Current Derating Curve**



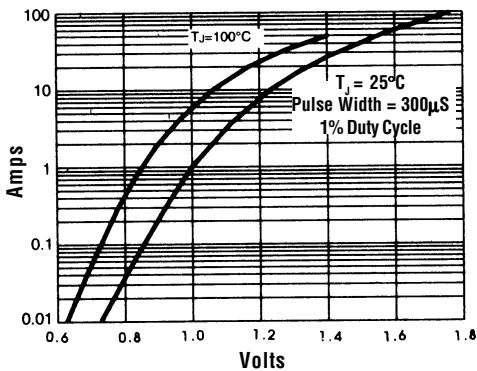
**Non-Repetitive Peak Forward Surge Current**



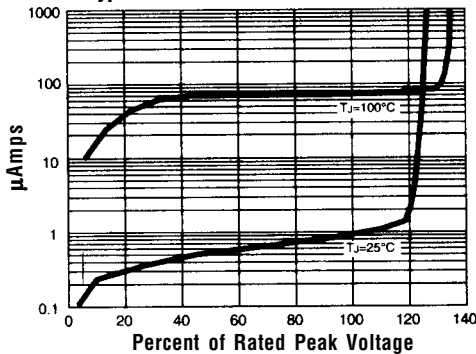
**Typical Junction Capacitance**



**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.