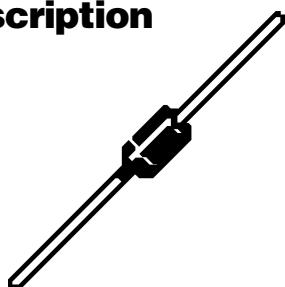
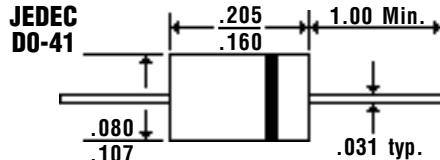


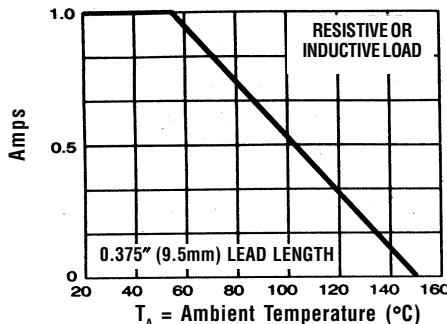
Description

Mechanical Dimensions

Features

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

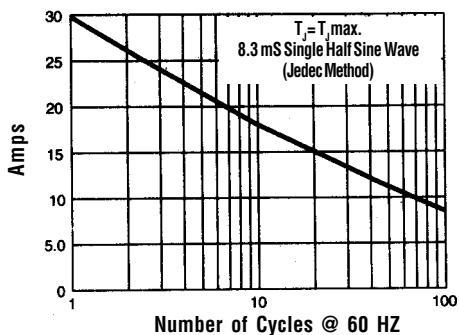
Electrical Characteristics @ 25°C.	GUF10A . . . 10M Series								Units
Maximum Ratings	GUF 10A	GUF 10B	GUF 10D	GUF 10F	GUF 10G	GUF 10J	GUF 10K	GUF 10M	
Peak Repetitive Reverse Voltage... V_{RRM}	50	100	200	300	400	600	800	1000	Volts
RMS Reverse Voltage... $V_{R(rms)}$	35	70	140	210	280	420	560	700	Volts
DC Blocking Voltage... V_{DC}	50	100	200	300	400	600	800	1000	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, ½ Sine Wave Superimposed on Rated Load						30			Amps
Forward Voltage @ Rated Forward Current and 25°C... V_F	< 1.1 >	< 1.4 >	< 1.7 >						Volts
Full Load Reverse Current... $I_R(\text{av})$ Full Cycle Average @ $T_A = 55^\circ\text{C}$					50				μAmps
DC Reverse Current... I_R @ Rated DC Blocking Voltage	$T_A = 25^\circ\text{C}$				10				μAmps
	$T_A = 125^\circ\text{C}$				50				μAmps
Typical Junction Capacitance... C_J (Note 1)	< 17 >	< 15 >							pF
Typical Thermal Resistance... R_{\thetaJC} (Note 2)	< 50 >	< 60 >							°C/W
Typical Reverse Recovery Time... t_{RR} (Note 3)	< 50 >	< 75 >							nS
Operating & Storage Temperature Range... T_J , T_{STRG}					-65 to 175				°C

GUFI0A...10M Series

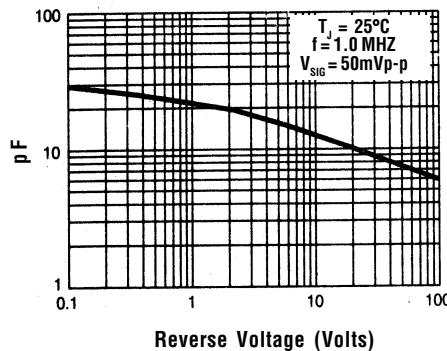
Forward Current Derating Curve



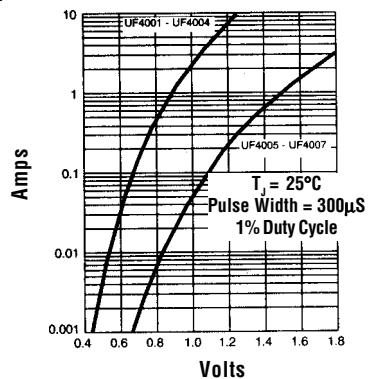
Non-Repetitive Peak Forward Surge Current



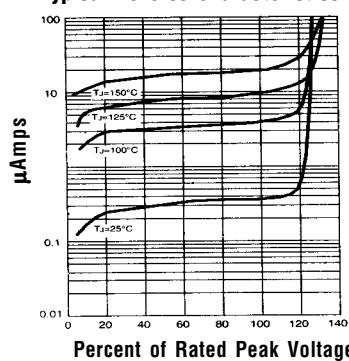
Typical Junction Capacitance



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