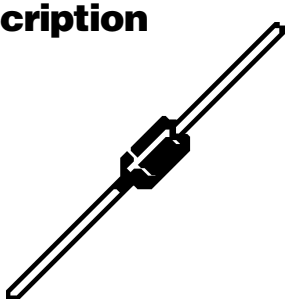
Semiconductor *Data Sheet*

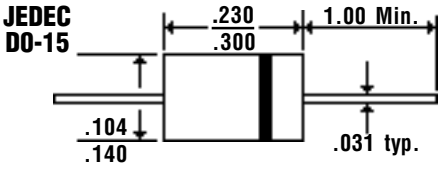
1.5 Amp ULTRA-FAST SWITCHING MEGARECTIFIERS

GUF15A...15M Series

Description



Mechanical Dimensions

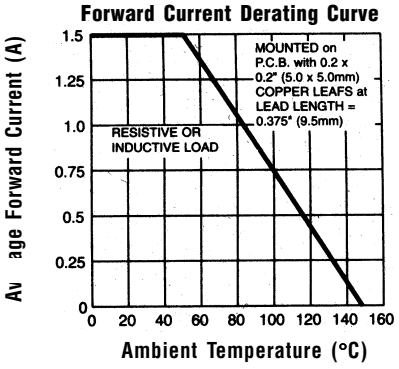


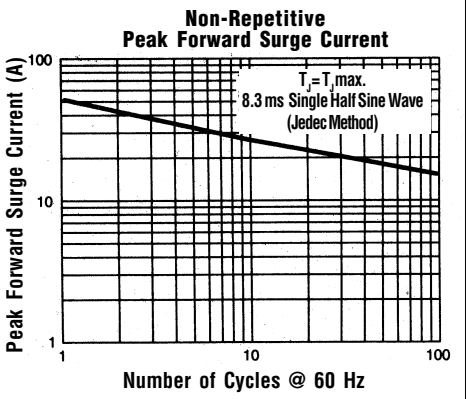
Features

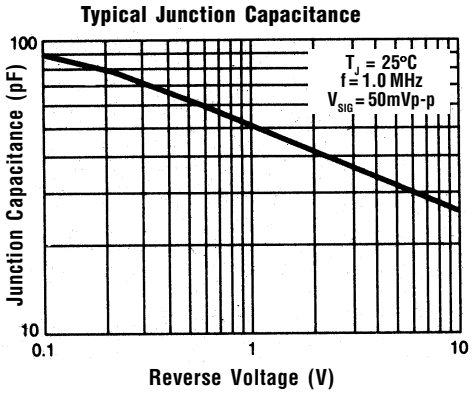
- **HIGH TEMPERATURE METALLURGICALLY BONDED CONSTRUCTION**
- **SINTERED GLASS CAVITY-FREE JUNCTION**
- **1.5 AMP OPERATION @ T_A = 55°C, WITH NO THERMAL RUNAWAY**
- **TYPICAL I_R < 0.2 μAmp**

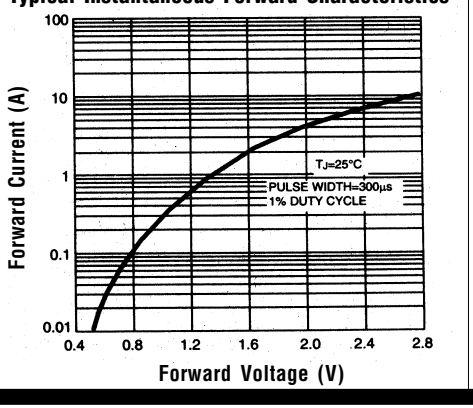
	GUF15A . . . 15M Series								Units
Maximum Ratings	**GUF 15A**	**GUF 15B**	**GUF 15D**	**GUF 15F**	**GUF 15G**	**GUF 15J**	**GUF 15K**	**GUF 15M**	
Peak Repetitive Reverse Voltage...V_{RRM}	50	100	200	300	400	600	800	1000	Volts
RMS Reverse Voltage...$V_{R(rms)}$	35	70	140	210	280	420	560	700	Volts
DC Blocking Voltage...V_{DC}	50	100	200	300	400	600	800	1000	Volts
Average Forward Rectified Current...$I_{F(av)}$ 3/8" Lead Length @ T_A = 55°C	1.5								Amps
Non-Repetitive Peak Forward Surge Current...I_{FSM} 8.3ms, ½ Sine Wave Superimposed on Rated Load	50								Amps
Operating & Storage Temperature Range...T_J, T_{STRG}	-65 to 175								°C
Electrical Characteristics									
Maximum Forward Voltage @ 1.5A ...V_F	< 1.1 >			< 1.4 >		< 1.7 >			Volts
Maximum Full Load Reverse Current...I_R(av) Full Cycle Average @ T_A = 55°C	100								μAmps
Maximum DC Reverse Current...I_R @ Rated DC Blocking Voltage T_A = 25°C	10								μAmps
T_A = 125°C	100								μAmps
Typical Junction Capacitance...C_J *(Note 1)*	< 40 >					< 50 >			pF
Typical Thermal Resistance...$R_{\theta JA}$ *(Note 2)*	20								°C/W
Maximum Reverse Recovery Time...t_{RR} *(Note 3)*	< 50 >					< 75 >			ns

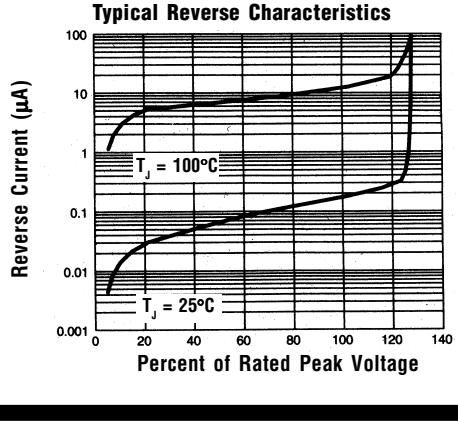
1.5 Amp ULTRA-FAST SWITCHING MEGARECTIFIERS











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.