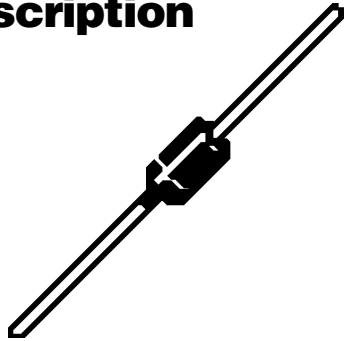


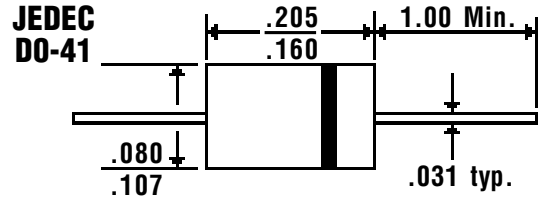
0.5 Amp FAST SWITCHING MEGARECTIFIERS

RGPO2-12E...-20E Series

Description



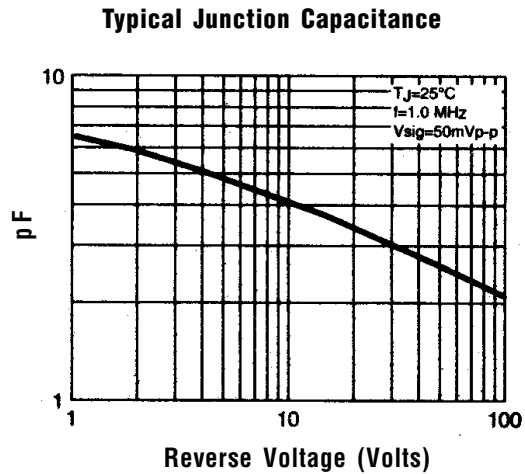
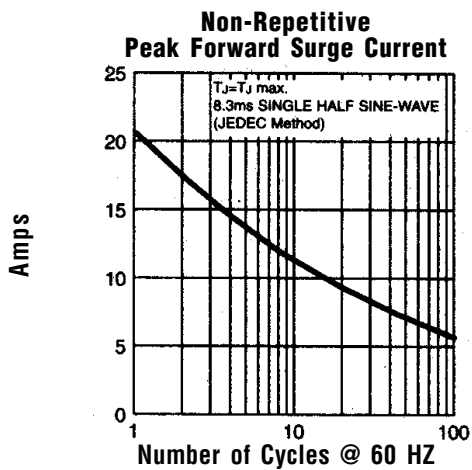
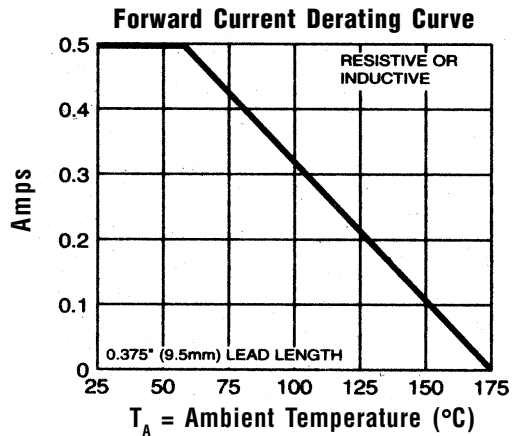
Mechanical Dimensions



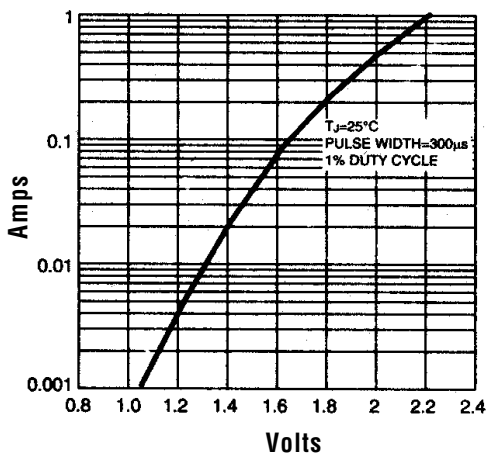
Features

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

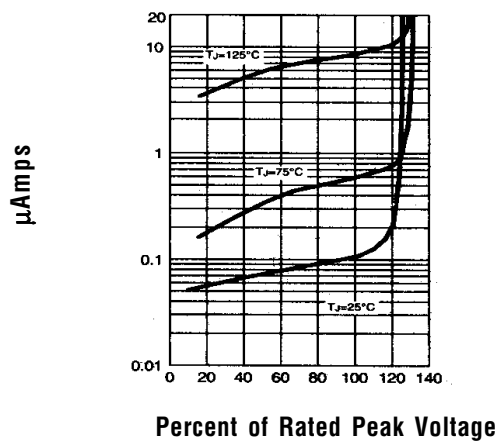
Electrical Characteristics @ 25°C.	RGPO2-12E . . . -20E Series					Units
Maximum Ratings	RGPO2-12E	RGPO2-14E	RGPO2-16E	RGPO2-8E	RGPO2-20E	
Peak Repetitive Reverse Voltage... V_{RRM}	1200	1400	1600	1800	2000	Volts
RMS Reverse Voltage... $V_{R(rms)}$	840	980	1120	1260	1400	Volts
DC Blocking Voltage... V_{DC}	1200	1400	1600	1800	2000	Volts
Average Forward Rectified Current... $I_{F(av)}$ Current 3/8" Lead Length @ $T_A = 55^\circ\text{C}$	0.5					Amps
Non-Repetitive Peak Forward Surge Current... I_{FSM} 8.3mS, 1/2 Sine Wave Superimposed on Rated Load	20					Amps
Forward Voltage @ 0.1A and 25°C... V_F	1.8					Volts
Full Load Reverse Current... $I_{R(av)}$ Full Cycle Average @ $T_A = 55^\circ\text{C}$	100					μAmps
DC Reverse Current... I_R @ Rated DC Blocking Voltage	$T_A = 25^\circ\text{C}$					μAmps
	$T_A = 125^\circ\text{C}$					μAmps
Typical Junction Capacitance... C_j (Note 1)	5.0					pF
Typical Thermal Resistance... $R_{\theta JA}$ (Note 2)	65					$^\circ\text{C}/\text{W}$
Typical Reverse Recovery Time... t_{RR} (Note 3)	300					nS
Operating & Storage Temperature Range... T_J, T_{STRG}	-65 to 175					$^\circ\text{C}$



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