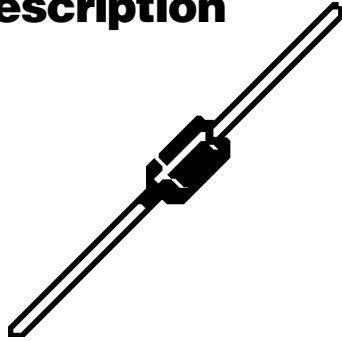


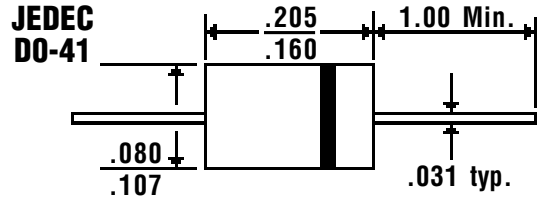
1.0 Amp FAST SWITCHING MEGARECTIFIERS

RGP10A... 10M Series

Description



Mechanical Dimensions

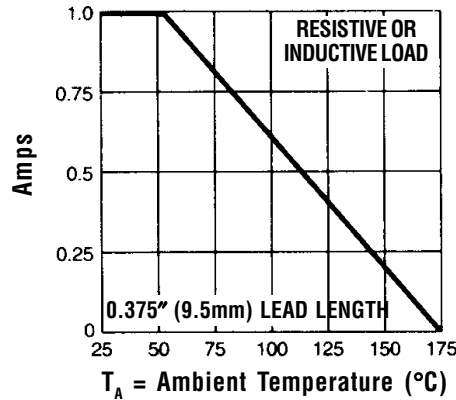


Features

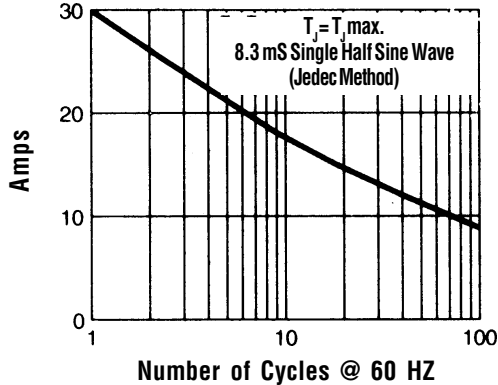
- HIGH TEMPERATURE METALLURGICALLY BONDED CONSTRUCTION
- SINTERED GLASS CAVITY-FREE JUNCTION
- 1.0 AMP OPERATION @ $T_A = 55^\circ\text{C}$, WITH NO THERMAL RUNAWAY
- TYPICAL $I_R < 0.1 \mu\text{Amp}$

Electrical Characteristics @ 25°C.	RGP10A . . . 10M Series								Units	
Maximum Ratings	RGP10A	RGP10B	RGP10D	RGP10G	RGP10J	RGP10K	RGP10M			
Peak Repetitive Reverse Voltage... V_{RRM}	50	100	200	400	600	800	1000		Volts	
RMS Reverse Voltage... $V_{R(rms)}$	35	70	140	280	420	560	700		Volts	
DC Blocking Voltage... V_{DC}	50	100	200	400	600	800	1000		Volts	
Average Forward Rectified Current... $I_{F(av)}$ Current 3/8" Lead Length @ $T_A = 75^\circ\text{C}$	.....			1.0	.....				Amps
Non-Repetitive Peak Forward Surge Current... I_{FSM} 8.3mS, 1/2 Sine Wave Superimposed on Rated Load	.....			30	.....				Amps
Forward Voltage @ 1.0A... V_F	.....			1.3	.....				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				.....	5.0	.....		μAmps	
						$T_A = 25^\circ\text{C}$	.....		
				.....	200	.....		μAmps	
Typical Junction Capacitance... C_J (Note 1)	.....			15	.....			pF	
Typical Thermal Resistance... $R_{\theta JA}$ (Note 2)	.....			55	.....			$^\circ\text{C/W}$	
Typical Reverse Recovery Time... t_{RR} (Note 3)	<		150	>		250	<		500	nS
Operating & Storage Temperature Range... T_J, T_{STRG}	..... -65 to 175								$^\circ\text{C}$

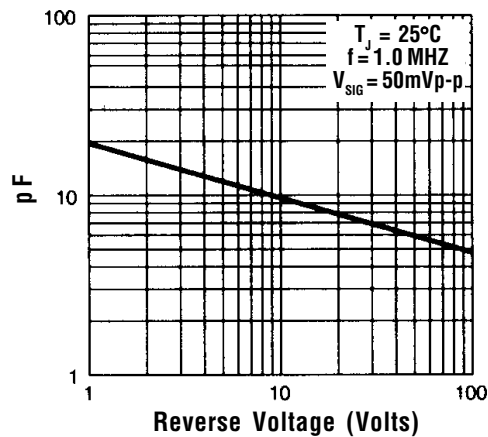
Forward Current Derating Curve



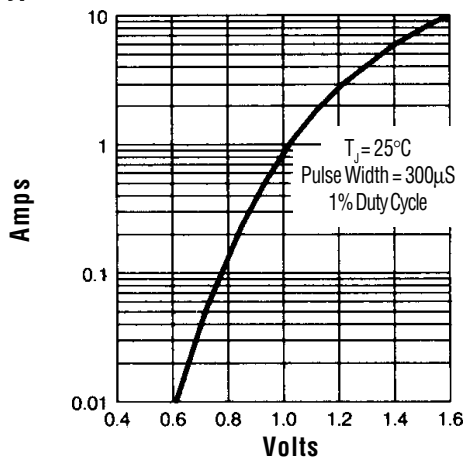
Non-Repetitive Peak Forward Surge Current



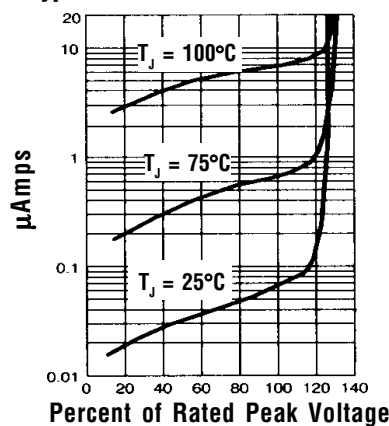
Typical Junction Capacitance



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