

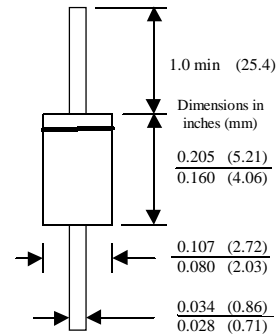
RGP10A - RGP10M

Features

- 1.0 ampere operation at $T_A = 55^\circ\text{C}$ with no thermal runaway.
- High temperature metallurgically bonded construction.
- Glass passivated cavity-free junction.
- Typical I_R less than $1\mu\text{A}$.
- Fast switching for high efficiency.



DO-41
COLOR BAND DENOTES CATHODE



1.0 Ampere Glass Passivated Fast Recovery Rectifiers

Absolute Maximum Ratings*

$T_A = 25^\circ\text{C}$ unless otherwise noted

Symbol	Parameter	Value	Units
I_O	Average Rectified Current .375 " lead length @ $T_L = 55^\circ\text{C}$	1.0	A
$i_{f(\text{surge})}$	Peak Forward Surge Current 8.3 ms single half-sine-wave Superimposed on rated load (JEDEC method)	30	A
P_D	Total Device Dissipation Derate above 25°C	2.5 17	W mW/ $^\circ\text{C}$
$R_{\theta JA}$	Thermal Resistance, Junction to Ambient	50	$^\circ\text{C}/\text{W}$
T_{stg}	Storage Temperature Range	-65 to +175	$^\circ\text{C}$
T_J	Operating Junction Temperature	-65 to +175	$^\circ\text{C}$

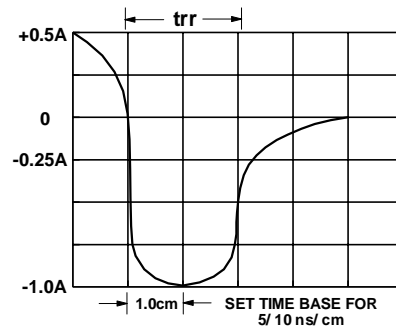
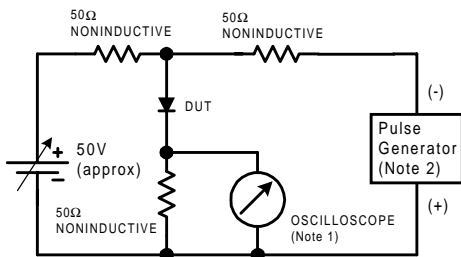
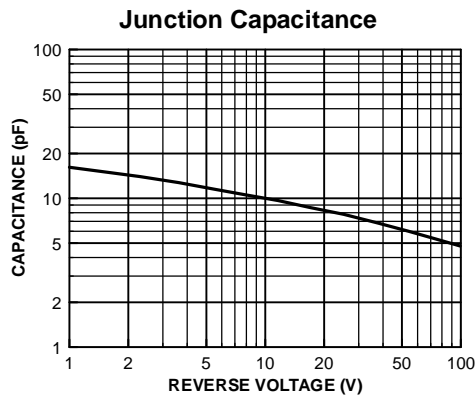
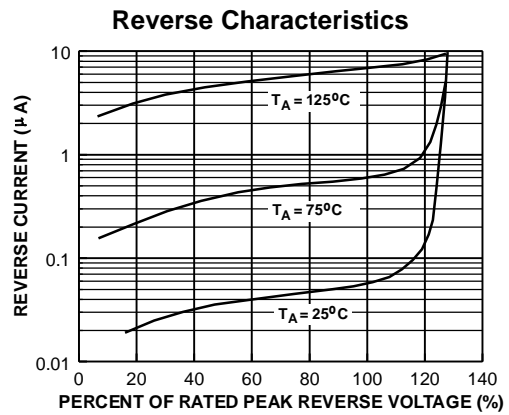
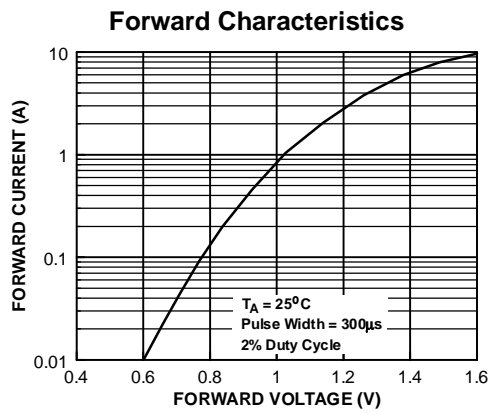
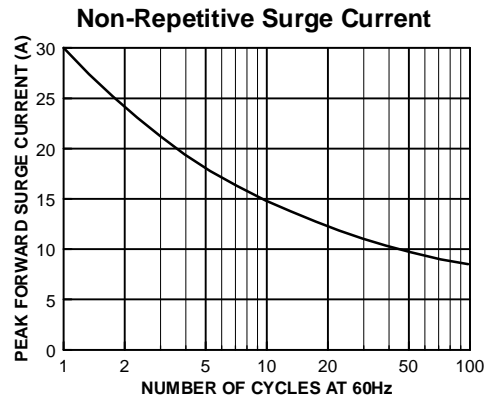
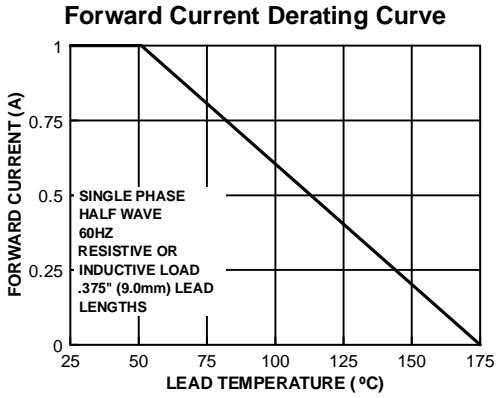
*These ratings are limiting values above which the serviceability of any semiconductor device may be impaired.

Electrical Characteristics

$T_A = 25^\circ\text{C}$ unless otherwise noted

Parameter	Device							Units
	10A	10B	10D	10G	10J	10K	10M	
Peak Repetitive Reverse Voltage	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	35	70	140	280	420	560	700	V
DC Reverse Voltage (Rated V_R)	50	100	200	400	600	800	1000	V
Maximum Reverse Current @ rated V_R								
$T_A = 25^\circ\text{C}$	5.0							μA
$T_A = 150^\circ\text{C}$	200							μA
Maximum Reverse Recovery Time $I_F = 0.5\text{ A}, I_R = 1.0\text{ A}, I_{rr} = 0.25\text{ A}$	150			250		500		nS
Maximum Forward Voltage @ 1.0 A	1.3							V
Typical Junction Capacitance $V_R = 4.0\text{ V}, f = 1.0\text{ MHz}$	15							pF

Typical Characteristics



Reverse Recovery Time Characteristic and Test Circuit Diagram

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Datasheet Identification	Product Status	Definition
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