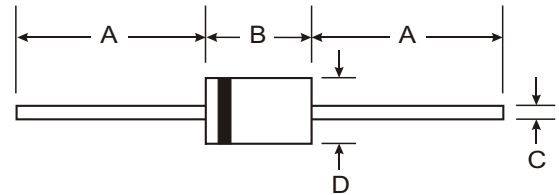
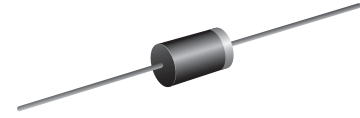


**VOLTAGE RANGE: 50 - 1000V**  
**CURRENT: 5.0 A**

### Features

- High current capability
- High surge current capability
- High reliability
- Low reverse current
- Low forward voltage drop
- Fast switching for high efficiency



### Mechanical Data

- Case : DO-201AD Molded plastic
- Epoxy : UL94V-O rate flame retardant
- Lead : Axial lead solderable per MIL-STD-202, Method 208 guaranteed
- Polarity : Color band denotes cathode end
- Mounting position : Any
- Weight : 1.16 grams

DO-201AD		
Dim	Min	Max
A	25.40	—
B	8.50	9.53
C	0.96	1.06
D	4.80	5.21
All Dimensions in mm		



### Maximum Ratings and Electrical Characteristics $T_A = 25^\circ\text{C}$ unless otherwise specified

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

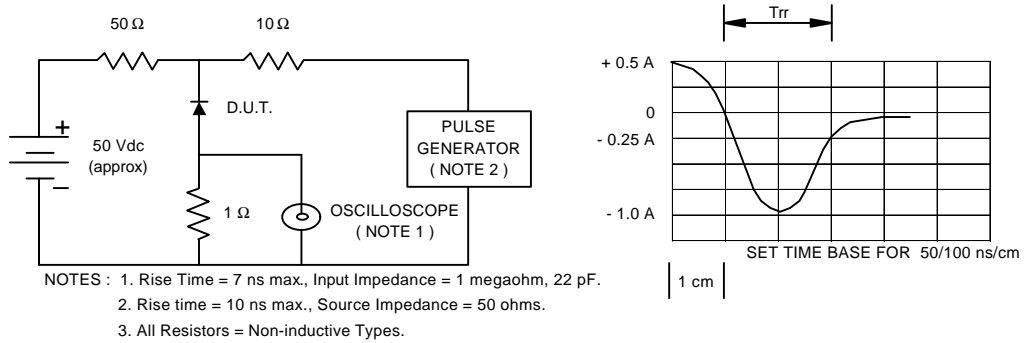
Characteristic	Symbol	RGP50A	RGP50B	RGP50D	RGP50G	RGP50J	RGP50K	RGP50M	Unit
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	$V_{RMS}$	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	$V_{DC}$	50	100	200	400	600	800	1000	V
Maximum Average Forward Current Half-Wave Resistive Load $T_a = 75^\circ\text{C}$	$I_{F(AV)}$	5.0							A
Peak Forward Surge Current 8.3ms Single half sine wave Superimposed on rated load (JEDEC Method)	$I_{FSM}$	300							A
Maximum Peak Forward Voltage at $I_F = 5\text{ A}$	$V_F$	1.3							V
Maximum DC Reverse Current at $V_{RRM}$	$I_R$	10							$\mu\text{A}$
Maximum Reverse Recovery Time ( Note 1 )	$T_{rr}$	150				250	500		ns
Junction Temperature Range	$T_J$	- 65 to + 150							$^\circ\text{C}$
Storage Temperature Range	$T_{STG}$	- 65 to + 150							$^\circ\text{C}$

### Notes :

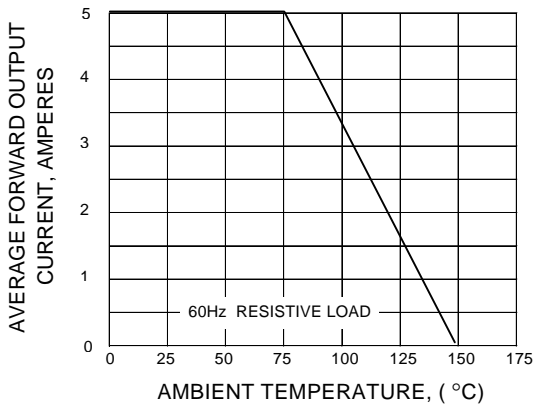
( 1 ) Reverse Recovery Test Conditions :  $I_F = 0.5\text{ A}$ ,  $I_R = 1.0\text{ A}$ ,  $I_{rr} = 0.25\text{ A}$ .

## RATING AND CHARACTERISTIC CURVES RGP50A - RGP50M

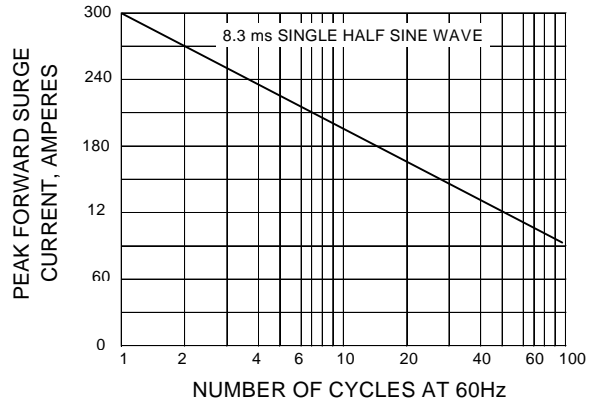
**FIG.1 - REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM**



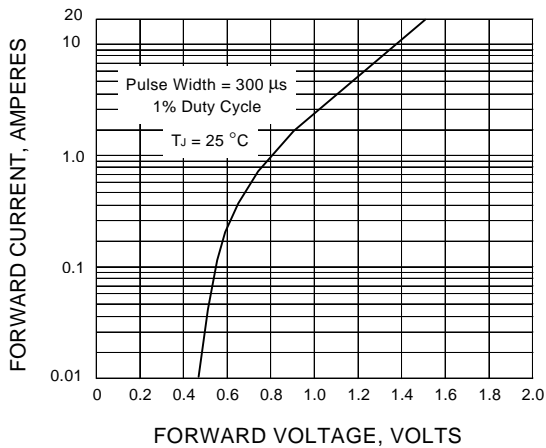
**FIG.2 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT**



**FIG.3 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT**



**FIG.4 - TYPICAL FORWARD CHARACTERISTICS**



**FIG.5 - TYPICAL REVERSE CHARACTERISTICS**

