

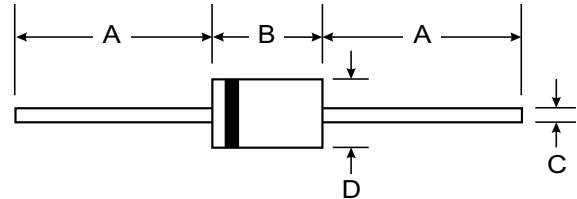
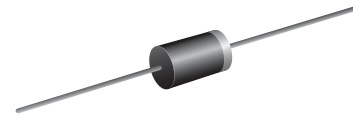
**VOLTAGE RANGE: 50 - 1000V**  
**CURRENT: 1.5 A**

### Features

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

### Mechanical Data

- Case : DO-15 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 : 0.4 gram



DO-15		
Dim	Min	Max
A	25.40	—
B	5.50	7.62
C	0.686	0.889
D	2.60	3.60
All Dimensions in mm		

### Maximum Ratings and Electrical Characteristics T<sub>A</sub> = 25°C unless otherwise specified

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

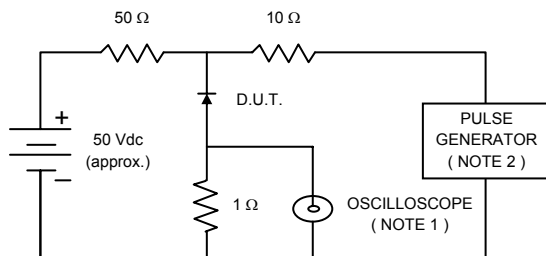
Characteristic	Symbol	RGP 15A	RGP 15B	RGP 15D	RGP 15G	RGP 15J	RGP 15K	RGP 15M	Unit
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V <sub>RMS</sub>	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	50	100	200	400	600	800	1000	V
Maximum Average Forward Current 0.375"(9.5mm) Lead Length      T <sub>a</sub> = 55 °C	I <sub>F(AV)</sub>	1.5							A
Peak Forward Surge Current, 8.3ms Single half sine wave Superimposed on rated load (JEDEC Method)	I <sub>FSM</sub>	50							A
Maximum Peak Forward Voltage at I <sub>F</sub> = 1.5 A	V <sub>F</sub>	1.3							V
Maximum DC Reverse Current      T <sub>a</sub> = 25 °C at Rated DC Blocking Voltage      T <sub>a</sub> = 150 °C	I <sub>R</sub>	5.0							μA
	I <sub>R(H)</sub>	200							μA
Maximum Reverse Recovery Time ( Note 1 )	T <sub>rr</sub>	150				250	500		ns
Typical Junction Capacitance ( Note 2 )	C <sub>J</sub>	25							pF
Typical Thermal Resistance ( Note 3 )	R <sub>θJA</sub>	30							°C/W
Junction Temperature Range	T <sub>J</sub>	- 65 to + 175							°C
Storage Temperature Range	T <sub>STG</sub>	- 65 to + 175							°C

#### Notes :

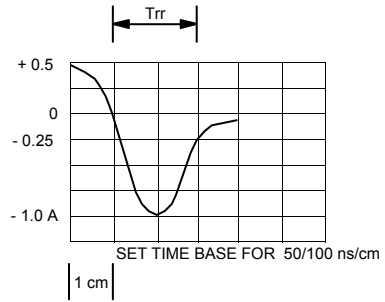
- ( 1 ) Reverse Recovery Test Conditions : I<sub>F</sub> = 0.5 A, I<sub>R</sub> = 1.0 A, I<sub>rr</sub> = 0.25 A.
- ( 2 ) Measured at 1.0 MHz and applied reverse voltage of 4.0 V<sub>DC</sub>
- ( 3 ) Thermal Resistance from Junction to Ambient at 0.375" (9.5mm) Lead Lengths, P.C. Board Mounted.

## RATING AND CHARACTERISTIC CURVES ( RGP15A - RGP15M )

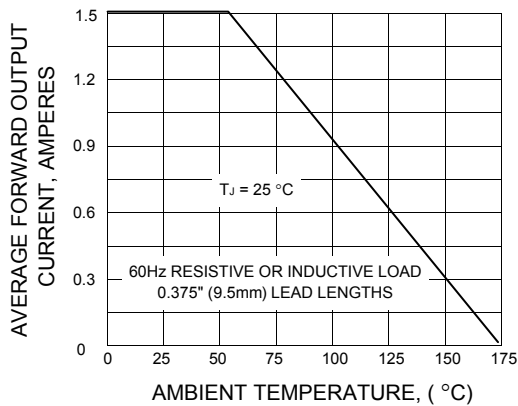
**FIG.1 - REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM**



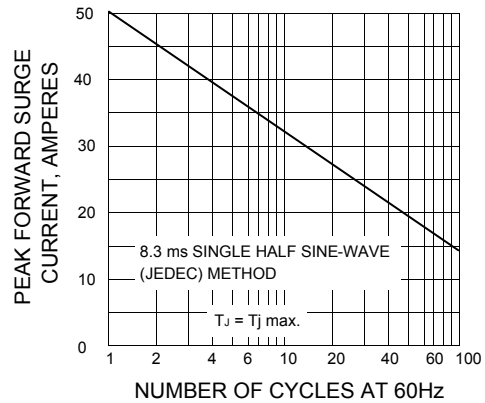
NOTES : 1. Rise Time = 7 ns max., Input Impedance = 1 megaohm, 22 pF.  
 2. Rise time = 10 ns max., Source Impedance = 50 ohms.  
 3. All Resistors = Non-inductive Types.



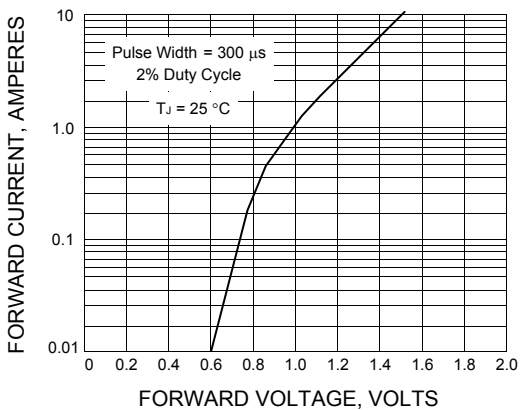
**FIG.2 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT**



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



**FIG.4 - TYPICAL FORWARD CHARACTERISTICS**



**FIG.5 - TYPICAL REVERSE CHARACTERISTICS**

