

**VOLTAGE RANGE: 50 - 1000V**

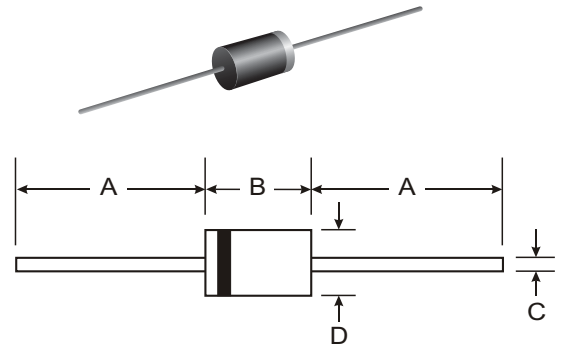
**CURRENT: 1.0 A**

### Features

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

### Mechanical Data

- Case: D O - 4 1 Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band
- Weight: 0.34 grams (approx.)
- Mounting Position: Any
- Marking: Type Number



DO-41		
Dim	Min	Max
A	25.40	—
B	4.06	5.21
C	0.71	0.864
D	2.00	2.72
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 10A	RGP 10B	RGP 10D	RGP 10G	RGP 10J	RGP 10K	RGP 10M	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 <small>T<sub>a</sub> = 55 °C</small>	I <sub>F(AV)</sub>	1.0							A
Peak Forward Surge Current, 8.3ms Single half sine wave Superimposed on rated load (JEDEC Method)	I <sub>FSM</sub>	30							A
Maximum Peak Forward Voltage at I <sub>F</sub> = 1.0 A	V <sub>F</sub>	1.3							V
Maximum Full load Reverse Current, Full Cycle Average 0.375",(9.5mm) Lead Length <small>T<sub>a</sub> = 55°C</small>	I <sub>R(AV)</sub>	100							μA
Maximum DC Reverse Current <small>T<sub>a</sub> = 25 °C</small> at Rated DC Blocking Voltage <small>T<sub>a</sub> = 150 °C</small>	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>	15							pf
Typical Thermal Resistance ( Note 3 )	R <sub>θJA</sub>	50							°C/W
Junction Temperature Range	T <sub>J</sub>	- 65 to + 175							°C
Storage Temperature Range	T <sub>STG</sub>	- 65 to + 175							°C

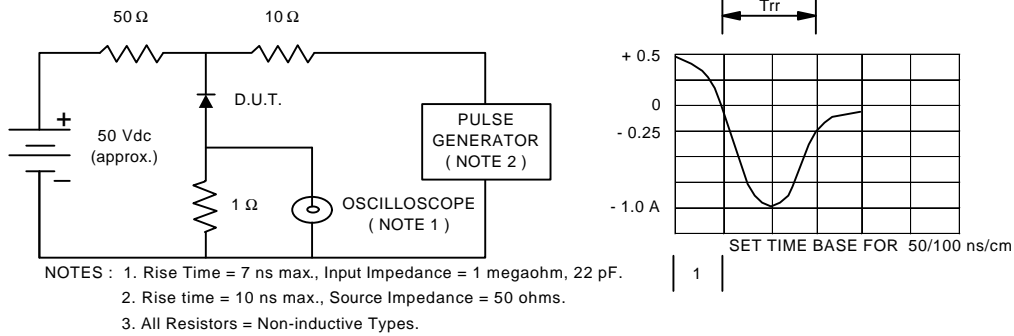
#### Notes :

- ( 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 Vdc
- ( 3 ) Thermal Resistance from Junction to Ambient at 0.375" (9.5mm) Lead Lengths, P.C. Board Mounted.

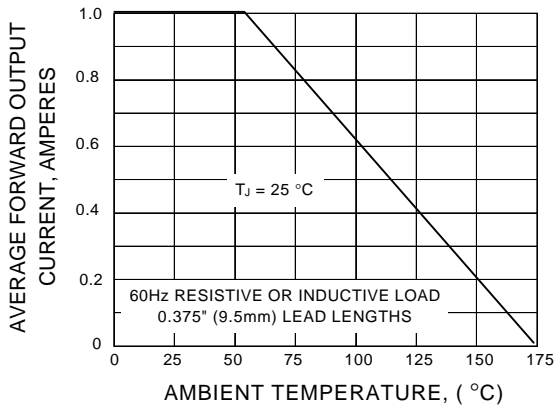


**RATING AND CHARACTERISTIC CURVES ( RGP10A - RGP10M )**

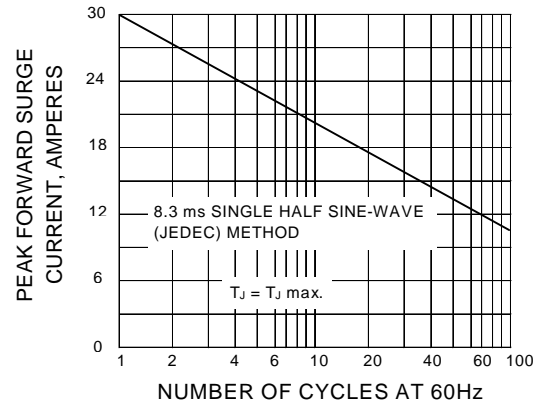
**FIG.1 - REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM**



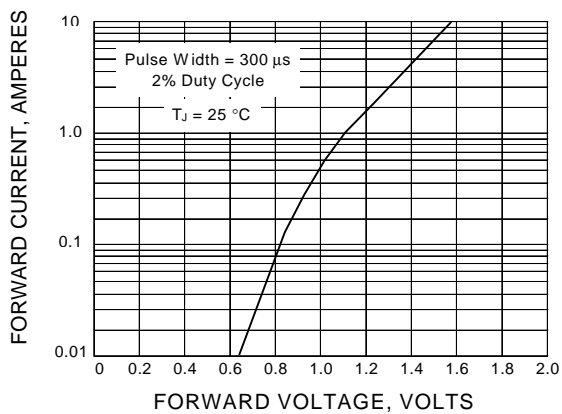
**FIG.2 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT**



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



**FIG.4 - TYPICAL FORWARD CHARACTERISTICS**



**FIG.5 - TYPICAL REVERSE CHARACTERISTICS**

