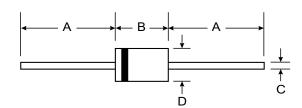


# PR2001G - PR2007G

### 2.0A FAST RECOVERY GLASS PASSIVATED RECTIFIER

#### **Features**

- Glass Passivated Die Construction
- Diffused Junction
- Fast Switching for High Efficiency
- High Current Capability and Low Forward Voltage Drop
- Surge Overload Rating to 80A Peak
- Low Reverse Leakage Current
- Plastic Material: UL Flammability Classification Rating 94V-0



## **Mechanical Data**

Case: Molded Plastic

 Terminals: Plated Leads Solderable per MIL-STD-202, Method 208

Polarity: Cathode Band Marking: Type Number

Weight: 0.4 grams (approx.)

DO-15								
Dim	Min	Max						
Α	25.40	_						
В	5.50	7.62						
С	0.686	0.889						
D	2.60	3.60						
All Dimensions in mm								

# Maximum Ratings and Electrical Characteristics @ TA = 25°C unless otherwise specified

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

Characteristic	Symbol	PR 2001G	PR 2002G	PR 2003G	PR 2004G	PR 2005G	PR 2006G	PR 2007G	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V <sub>RRM</sub> V <sub>RWM</sub> V <sub>R</sub>	50	100	200	400	600	800	1000	V
RMS Reverse Voltage	V <sub>R(RMS)</sub>	35	70	140	280	420	560	700	٧
Average Rectified Output Current (Note 1) @ T <sub>A</sub> = 55°	c lo	2.0					Α		
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave Superimposed on Rated Load (JEDEC Method)		80						А	
Forward Voltage Drop @ I <sub>F</sub> = 2.0	A V <sub>FM</sub>	1.3						٧	
Peak Reverse Current @ T <sub>A</sub> = 25° at Rated DC Blocking Voltage @ T <sub>A</sub> = 100°		5.0 100						μА	
Reverse Recovery Time (Note 3)		150 250 500				00	ns		
Typical Junction Capacitance (Note 2)		35							pF
Typical Thermal Resistance Junction to Ambient		50						K/W	
Operating and Storage Temperature Range		-65 to +150						°C	

Notes:

- 1. Valid provided that leads are maintained at ambient temperature at a distance of 9.5mm from the case.
- 2. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.
- 3. Measured with  $I_F$  = 0.5A,  $I_R$  = 1.0A,  $I_{rr}$  = 0.25A. See figure 5.

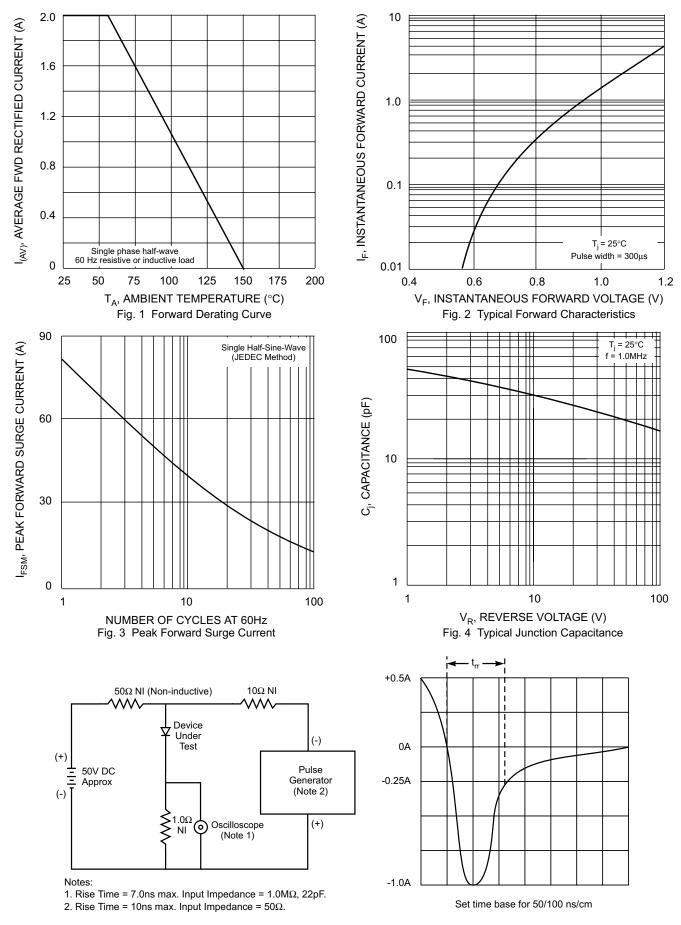


Fig. 5 Reverse Recovery Time Characteristic and Test Circuit