

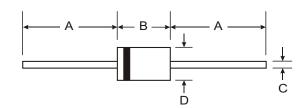
PR2001G - PR2007G

2.0A FAST RECOVERY GLASS PASSIVATED RECTIFIER

Features

Glass Passivated Die Construction Fast Switching for High Efficiency Surge Overload Rating to 80A Peak Low Reverse Leakage Current

Lead Free Finish, RoHS Compliant (Note 4)



Mechanical Data

Case: DO-15

Case Material: Molded Plastic. UL Flammability Classification

Rating 94V-0

Moisture Sensitivity: Level 1 per J-STD-020C

Terminals: Finish - Tin. Solderable per MIL-STD-202,

Method 208 (e3) Polarity: Cathode Band Marking: Type Number

Ordering Information: See Page 3 Weight: 0.4 grams (approximate)

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 @ T_A = 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 (Note 5)		V _{RRM} V _{RWM} V _R	50	100	200	400	600	800	1000	٧
RMS Reverse Voltage		V _{R(RMS)}	35	70	140	280	420	560	700	V
Average Rectified Output Current (Note 1)	@ T _A = 55 C	Io				2.0				Α
Non-Repetitive Peak Forward Surge Currer 8.3ms Single half sine-wave Superimposed	nt on Rated Load	I _{FSM}				80				Α
Forward Voltage Drop	$@ I_F = 2.0A$	A V _{FM}		1.3						V
Peak Reverse Current at Rated DC Blocking Voltage (Note 5)	@ T _A = 25 C @ T _A = 100 C	I _{RM}	5.0 100			Α				
Reverse Recovery Time (Note 3)		t _{rr}		15	50		250	50	00	ns
Typical Total Capacitance (Note 2)		Ст	35					pF		
Typical Thermal Resistance Junction to Ambient		R _{JA}	50						°C/W	
Operating and Storage Temperature Range		T _j , T _{STG}	-65 to +150						С	

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.
- 4. RoHS revision 13.2.2003. Glass and high temperature solder exemptions applied, see EU Directive Annex Notes 5 and 7.
- 5. Short duration pulse test used to minimize self-heating effect.

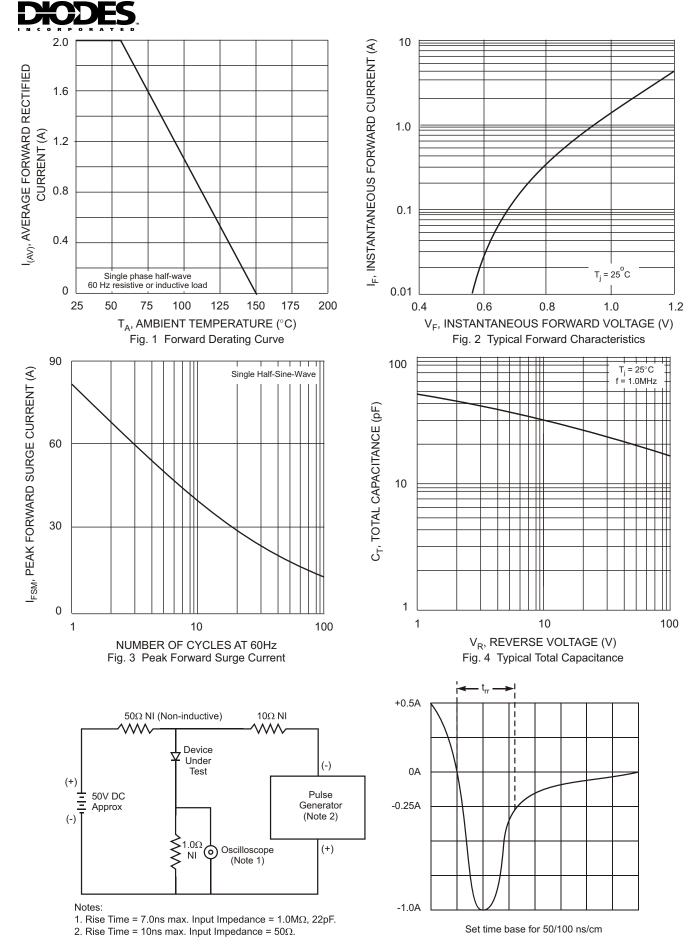


Fig. 5 Reverse Recovery Time Characteristic and Test Circuit



Ordering Information (Note 6)

Device	Packaging	Shipping
PR2001G-T	DO-15	4K/Tape & Reel, 13-inch
PR2002G-T	DO-15	4K/Tape & Reel, 13-inch
PR2003G-T	DO-15	4K/Tape & Reel, 13-inch
PR2004G-T	DO-15	4K/Tape & Reel, 13-inch
PR2005G-T	DO-15	4K/Tape & Reel, 13-inch
PR2006G-T	DO-15	4K/Tape & Reel, 13-inch
PR2007G-T	DO-15	4K/Tape & Reel, 13-inch

Notes:

6. For packaging details, visit our website at http://www.diodes.com/datasheets/ap02008.pdf.

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