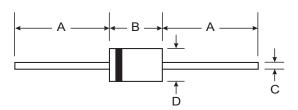


PR1501G/S - PR1507G/S

1.5A FAST RECOVERY GLASS PASSIVATED RECTIFIER

Features

- Glass Passivated Die Construction
- Fast Switching for High Efficiency
- Surge Overload Rating to 50A Peak
- Low Reverse Leakage Current
- Lead Free Finish, RoHS Compliant (Note 4)



Mechanical Data

- Case: DO-41, DO-15
- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0
- Moisture Sensitivity: Level 1 per J-STD-020C
- Terminals: Finish Tin. Plated Leads Solderable per MIL-STD-202, Method 208 (3)
- Polarity: Cathode Band
- Marking: Type Number
- Ordering Information: See Last Page DO-41 Weight: 0.35 grams (approximate)
- DO-15 Weight: 0.40 grams (approximate)

Dim	DO	-41	DO-15			
Dilli	Min	Max	Min	Max		
Α	25.40	_	25.40	_		
В	4.06	5.21	5.50	7.62		
С	0.71	0.864	0.686	0.889		
D	2.00	2.72	2.60	3.60		
All Dimensions in mm						

"GS" Suffix Designates DO-41 Package "G" Suffix Designates DO-15 Package

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	PR1501 G/GS	PR1502 G/GS	PR1503 G/GS	PR1504 G/GS	PR1505 G/GS	PR1506 G/GS	PR1507 G/GS	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage (Note 5)		$egin{array}{c} V_{RRM} \ V_{R} \ \end{array}$	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 @ T _A = 55°C (Note 1)		Io	1.5						Α	
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave Superimposed on Rated Load		I _{FSM}	50						Α	
Forward Voltage @ I _F = 1.5A		V_{FM}	1.3						V	
Peak Reverse Current		I _{RM}	5.0 200						μΑ	
Reverse Recovery Time (Note 3)		t _{rr}	150 250 500		00	ns				
Typical Total Capacitance (Note 2)		Ст	25					pF		
Typical Thermal Resistance Junction to Ambient		$R_{\theta JA}$	65						°C/W	
Operating and Storage Temperature Range		T _{j,} T _{STG}	-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 IF = 0.5A, IR = 1.0A, Irr = 0.2 5A. 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.



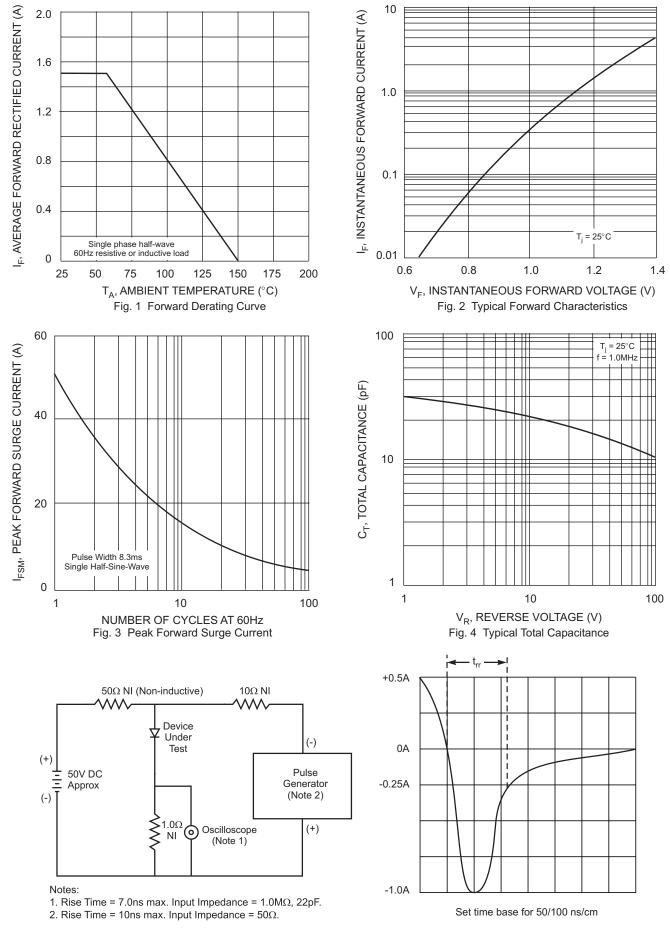


Fig. 5 Reverse Recovery Time Characteristic and Test Circuit



Ordering Information (Note 6)

Device	Packaging	Shipping	
PR1501G-B	DO-15	1K/Bulk	
PR1501G-T	DO-15	4K/Tape & Reel, 13-inch	
PR1502G-B	DO-15	1K/Bulk	
PR1502G-T	DO-15	4K/Tape & Reel, 13-inch	
PR1503G-B	DO-15	1K/Bulk	
PR1503G-T	DO-15	4K/Tape & Reel, 13-inch	
PR1504G-B	DO-15	1K/Bulk	
PR1504G-T	DO-15	4K/Tape & Reel, 13-inch	
PR1505G-B	DO-15	1K/Bulk	
PR1505G-T	DO-15	4K/Tape & Reel, 13-inch	
PR1506G-B	DO-15	1K/Bulk	
PR1506G-T	DO-15	4K/Tape & Reel, 13-inch	
PR1507G-B	DO-15	1K/Bulk	
PR1507G-T	DO-15	4K/Tape & Reel, 13-inch	
PR1501GS-A	DO-41	5K/Ammo Pack	
PR1501GS-B	DO-41	1K/Bulk	
PR1501GS-T	DO-41	5K/Tape & Reel, 13-inch	
PR1502GS-A	DO-41	5K/Ammo Pack	
PR1502GS-B	DO-41	1K/Bulk	
PR1502GS-T	DO-41	5K/Tape & Reel, 13-inch	
PR1503GS-A	DO-41	5K/Ammo Pack	
PR1503GS-B	DO-41	1K/Bulk	
PR1503GS-T	DO-41	5K/Tape & Reel, 13-inch	
PR1504GS-A	DO-41	5K/Ammo Pack	
PR1504GS-B	DO-41	1K/Bulk	
PR1504GS-T	DO-41	5K/Tape & Reel, 13-inch	
PR1505GS-A	DO-41	5K/Ammo Pack	
PR1505GS-B	DO-41	1K/Bulk	
PR1505GS-T	DO-41	5K/Tape & Reel, 13-inch	
PR1506GS-A	DO-41	5K/Ammo Pack	
PR1506GS-B	B DO-41 1K/Bulk		
PR1506GS-T	DO-41 5K/Tape & Reel, 13-inch		
PR1507GS-A	DO-41	5K/Ammo Pack	
PR1507GS-B	DO-41	1K/Bulk	
PR1507GS-T	DO-41	5K/Tape & Reel, 13-inch	

 $Notes: \quad 6. \quad \text{For packaging details, visit our website at http://www.diodes.com/datasheets/ap02008.pdf.}$

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