

PR1501/S - PR1505/S

1.5A FAST RECOVERY RECTIFIER

Features

- Diffused Junction
- Fast Switching for High Efficiency
- High Current Capability and Low Forward Voltage Drop
- Surge Overload Rating to 50A Peak
- Low Reverse Leakage Current
- Plastic Material: UL Flammability Classification Rating 94V-0

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Mechanical Data

Case: Molded Plastic

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

Polarity: Cathode BandMarking: Type Number

DO-41 Weight: 0.3 grams (approx.)
DO-15 Weight: 0.4 grams (approx.)

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

"S" Suffix Designates DO-41 Package No Suffix Designates DO-15 Package

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 1501/S	PR 1502/S	PR 1503/S	PR 1504/S	PR 1505/S	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V _{RRM} V _{RWM} V _R	50	100	200	400	600	V
RMS Reverse Voltage	V _{R(RMS)}	35	70	140	280	420	٧
Average Rectified Output Current (Note 1) @ T _A = 50°	o lo	1.5					А
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave Superimposed on Rated Lo (JEDEC Method)	ad I _{FSM}	50					А
Forward Voltage @ I _F = 1.5	A V _{FM}	1.2					٧
Peak Reverse Current @ T _A = 25° at Rated DC Blocking Voltage @ T _A = 100°		5.0 100					μА
Reverse Recovery Time (Note 3)	t _{rr}	150 250				ns	
Typical Junction Capacitance (Note 2)	Cj	20 10			10	pF	
Typical Thermal Resistance Junction to Ambient	$R_{\theta JA}$	35					K/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 I_F = 0.5A, I_R = 1.0A, I_{rr} = 0.25A. See figure 5.

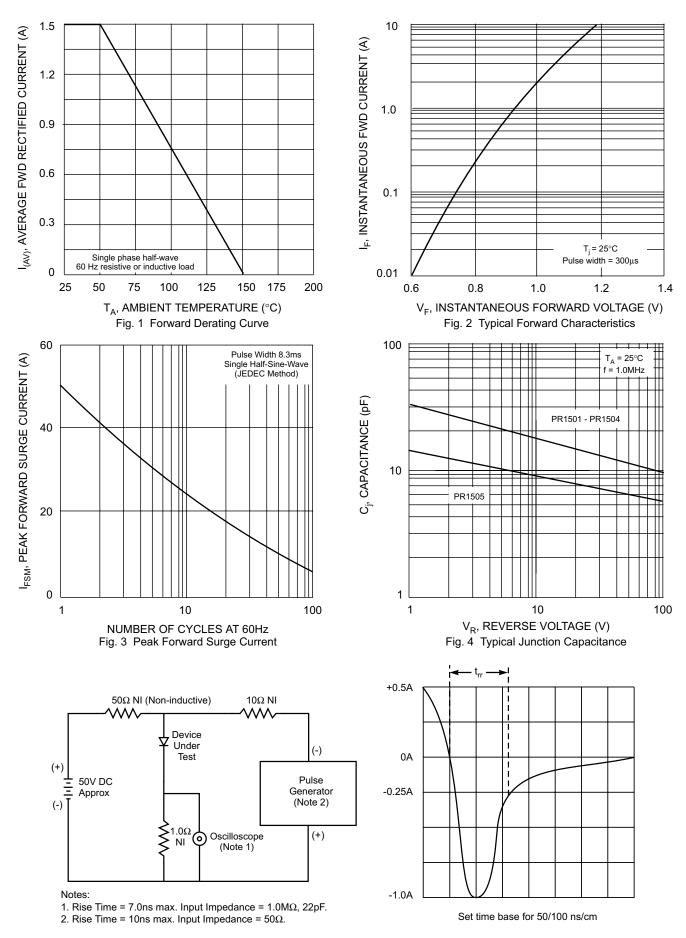


Fig. 5 Reverse Recovery Time Characteristic and Test Circuit