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	PR1001G	PR1002G	PR1003G	PR1004G	PR1005G	PR1006G	PR1007G	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage (Note 7)	V_{RRM} V_{RWM} V_R	50	100	200	400	600	800	1000	V
RMS Reverse Voltage	$V_{R(RMS)}$	35	70	140	280	420	560	700	V
Average Rectified Output Current (Note 4) @ T_A = +55°C	I_O	1.0							A
Non-Repetitive Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load	I_{FSM}	30							A
Forward Voltage Drop @ I_F = 1.0A	V_{FM}	1.3							V
Peak Reverse Current @ T_A = +25°C at Rated DC Blocking Voltage (Note 7) @ T_A = +100°C	I_{RM}	5.0 50							µA
Reverse Recovery Time (Note 6)	t_{RR}	150				250	500		ns
Typical Total Capacitance (Note 5)	C_T	15				8			pF

Thermal Characteristics

Characteristic	Symbol	Value	Unit
Typical Thermal Resistance Junction to Ambient (Note 4)	$R_{\theta JA}$	95	°C/W
Operating and Storage Temperature Range	T_J, T_{STG}	-65 to +150	°C

Notes:
4. Valid provided that leads are maintained at ambient temperature at a distance of 9.5mm from the case.
5. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.
6. Measured with I_F = 0.5A, I_R = 1.0A, I_{RR} = 0.25A. See Figure 5.
7. Short duration pulse test used to minimize self-heating effect.

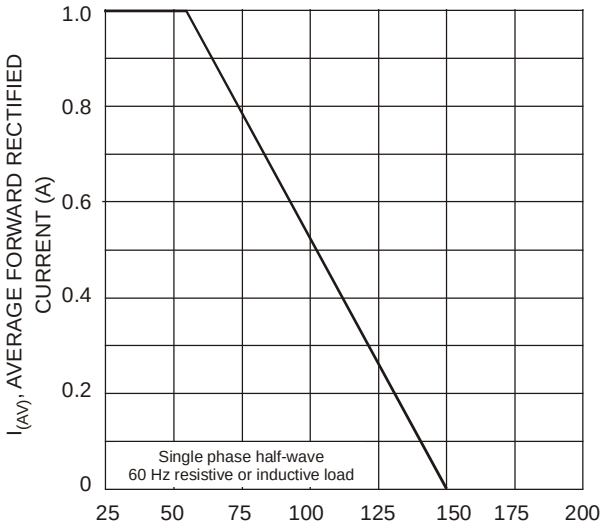


Fig. 1 Forward Derating Curve

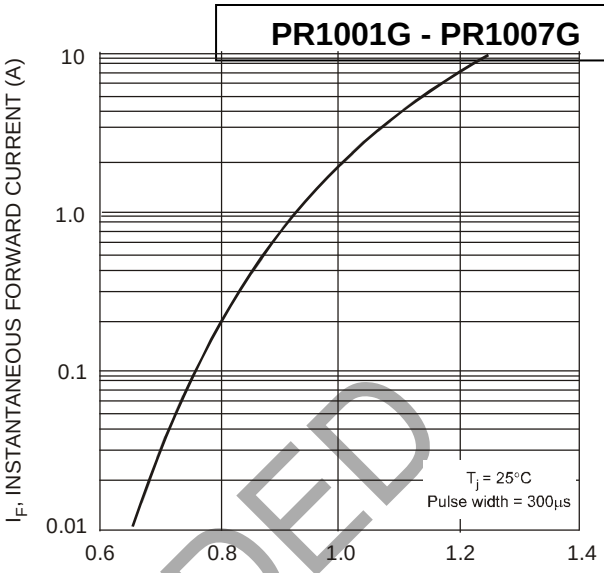


Fig. 2 Typical Forward Characteristics

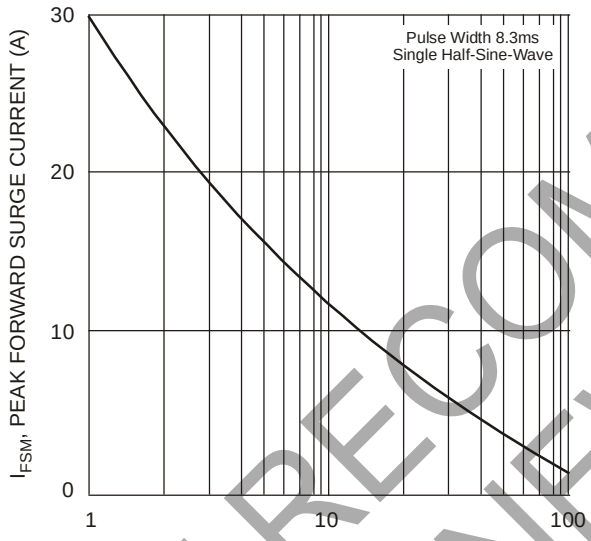


Fig. 3 Peak Forward Surge Current

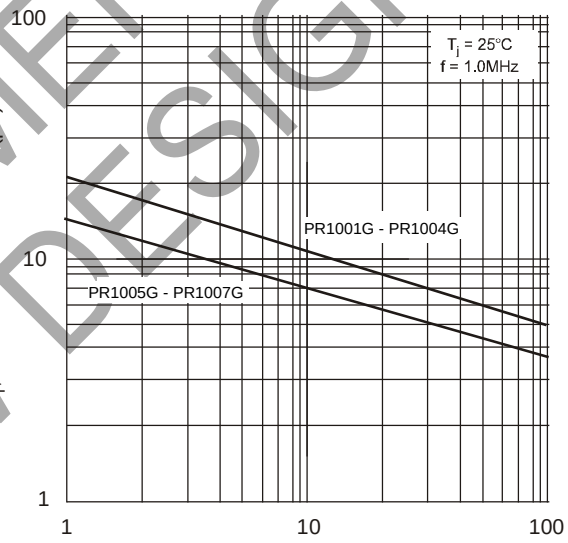
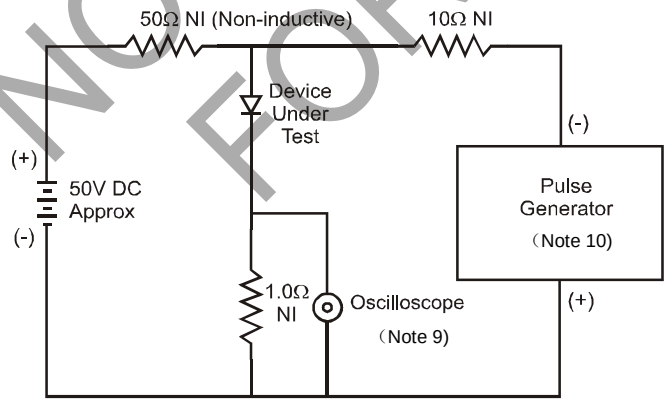


Fig. 4 Typical Total Capacitance



Notes:
9. Rise Time = 7.0ns max. Input Impedance = 1.0MΩ, 22pF
10. Rise Time = 10ns max. Input Impedance = 50Ω

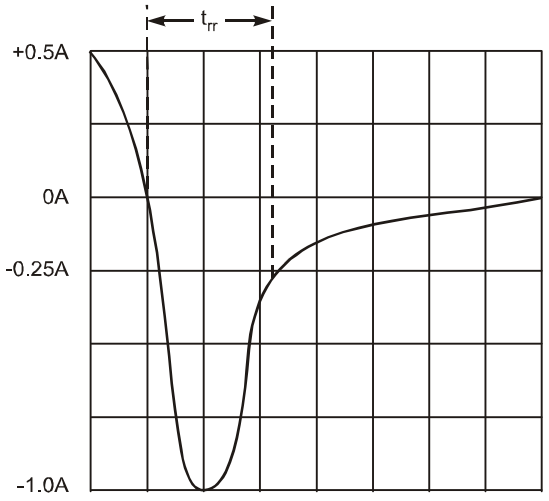
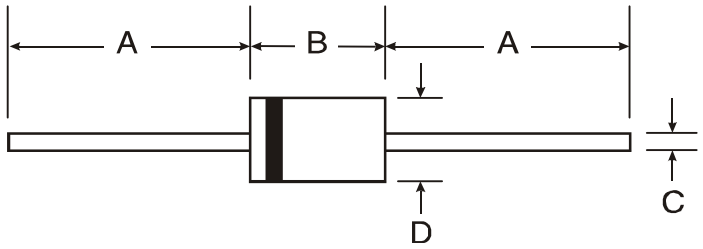


Fig. 5 Reverse Recovery Time Characteristic and Test Circuit

Package Outline Dimensions

Please see http://www.diodes.com/package-outlines.html for the latest version.

DO-41 (Plastic)



DO-41 (Plastic)		
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		

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