

PR1000R THRU PR1800R

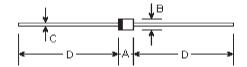
PHOTOFLASH RECTIFIER

Reverse Voltage - 1000 to 1800 Volts Forward Current - 0.5 Ampere

Features

- Fast switching
- Low leakage
- Low forward voltage drop
- High current capability
- High surge capability
- High reliability





Mechanical Data

• Case: Molded plastic, R-1

• Epoxy: UL94V-0 rate flame retardant

• Lead: MIL-STD-202E method 208C guaranteed

Mounting Position: Any

• Weight: 0.007 ounce, 0.20 gram

DIMENSIONS									
DIM	inches		m	Note					
	Min.	Max.	Min.	Max.	Note				
Α	0.114	0.138	2.9	3.5					
В	0.095	0.099	2.42	2.51	ф				
С	0.020	0.024	0.5	0.6	ф				
D	1.000	-	25.40	-					

Maximum Ratings and Electrical Characteristics

Single phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

	Symbols	PR1000R	PR1200R	PR1400R	PR1600R	PR1800R	Units
Maximum repetitive peak reverse voltage	V _{RRM}	1000	1200	1400	1600	1800	Volts
Maximum RMS voltage	V _{RMS}	700	840	980	1120	1260	Volts
Maximum DC blocking voltage	V _{DC}	1000	1200	1400	1600	1800	Volts
Maximum average forward rectified current 0.375" (9.5mm) lead length at $\rm T_A = 55^{\circ}C$	I _(AV)	500					mAmps
Peak forward surge current 8.3mS single half sine-wave superimposed on rated load (MIL-STD-750D 4066 method)	I _{FSM}	30.0					Amps
Maximum instantaneous forward voltage at 0.5A DC	V _F	1.5					Volts
Maximum DC reverse current at rated DC blocking voltage T_A =25°C	I _R		μА				
Maximum reverse recovery time (Note 1)	T _{rr}	300.0					nS
Typical junction capacitance (Note 2)	C _j	10					ρF
Operating and storage temperature range	T _J , T _{STG}	-65 to +175					Ç

Notes:

- (1) Test conditions: I_F =0.5A, I_R =1.0A, I_{RR} =0.25A
- (2) Measured at 1.0MHz and applied reverse voltage of 4.0 volts

RATINGS AND CHARACTERISTIC CURVES

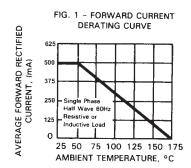


FIG. 2 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS 1.0 .8 .6 INSTANTANEOUS FORWARD CURRENT (A) .4 .2 .06 .04 .02 Pulse Width = 300 1% Duty Cycle :01 .8 1.0 1.1 1.2 1.3 INSTANTANEOUS FORWARD VOLTAGE, VOLTS

FIG. 3 - MAXIMUM NON-REPETITIVE SURGE CURRENT

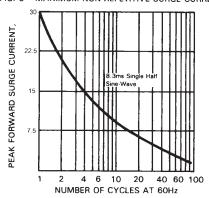


FIG. 4 - TYPICAL JUNCTION CAPACITANCE

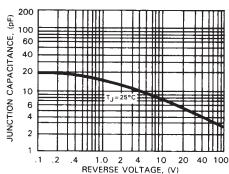


FIG. 5 - TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTICS

