



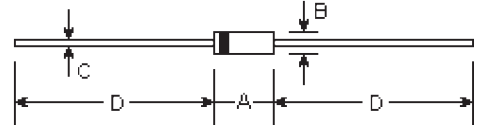
# R1200 THRU R2000

**HIGH VOLTAGE SILICON RECTIFIER**  
**Reverse Voltage - 1200 to 2000 Volts**  
**Forward Current - 0.2 to 0.5 Ampere**

## Features

- Low cost
- Low leakage
- Low forward voltage drop
- High current capability

## DO-41



## Mechanical Data

- **Case:** Molded plastic
- **Epoxy:** UL94V-0 rate flame retardant
- **Lead:** MIL-STD-202 method 208C guaranteed
- **Mounting Position:** Any
- **Weight:** 0.012 ounce, 0.335 gram

DIMENSIONS					Note
DIM	inches		mm		
	Min.	Max.	Min.	Max.	
A	0.165	0.205	4.2	5.2	
B	0.079	0.106	2.0	2.7	ϕ
C	0.028	0.034	0.71	0.86	ϕ
D	1.000	-	25.40	-	

## Maximum Ratings and Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

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

For capacitive load, derate current by 20%.

	Symbols	R1200	R1500	R1800	R2000	Units
Maximum repetitive peak reverse voltage	$V_{RRM}$	1200	1500	1800	2000	Volts
Maximum RMS voltage	$V_{RMS}$	840	1050	1260	1400	Volts
Maximum DC blocking voltage	$V_{DC}$	1200	1500	1800	2000	Volts
Maximum average forward rectified current 0.375" (9.5mm) lead length at $T_A=50^\circ\text{C}$	$I_{(AV)}$	500			200	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 0.5/0.2A DC	$V_F$	2.0		3.0		Volts
Maximum full load reverse current average, full cycle 0.375" (9.5mm) lead length at $T_L=75^\circ\text{C}$	$I_{R(AV)}$	30.0				$\mu\text{A}$
Maximum DC reverse current at rated DC blocking voltage $T_A=25^\circ\text{C}$ $T_A=100^\circ\text{C}$	$I_R$	5.0 50.0				$\mu\text{A}$
Typical junction capacitance (Note 1)	$C_J$	30.0				$\rho\text{F}$
Operating and storage temperature range	$T_J, T_{STG}$	-65 to +175				$^\circ\text{C}$

Note:

(1) Measured at 1.0MHz and applied reverse voltage of 4.0 volts

# RATINGS AND CHARACTERISTIC CURVES

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

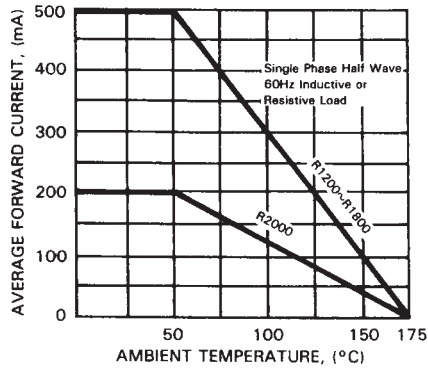


FIG. 2 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

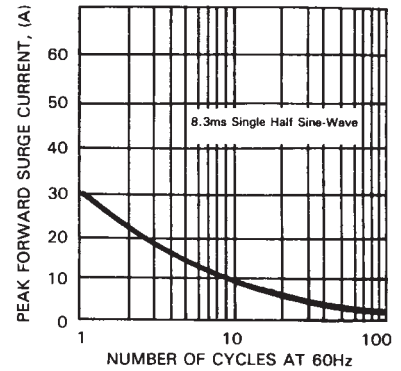


FIG. 3 - TYPICAL REVERSE CHARACTERISTICS

