

# R1200 THRU R2000



## HIGH VOLTAGE SILICON RECTIFIERS



### FEATURES

- \* Low forward voltage drop
- \* High current capability
- \* High reliability
- \* High surge current capability

### MECHANICAL DATA

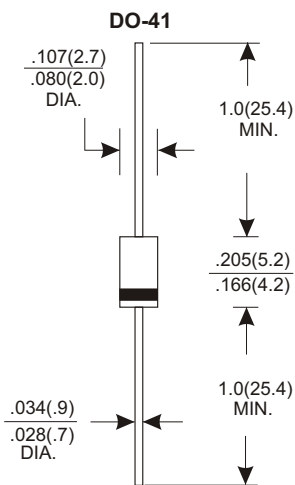
- \* Case: Molded plastic
- \* Epoxy: UL 94V-0 rate flame retardant
- \* Lead: Axial leads, solderable per MIL-STD-202, method 208 guaranteed
- \* Polarity: Color band denotes cathode end
- \* Mounting position: Any

### VOLTAGE RANGE

1200 to 2000 Volts

### CURRENT

500m/200m Ampere



Dimensions in inches and (millimeters)

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating 25°C ambient temperature unless otherwise specified.  
Single phase half wave, 60Hz, resistive or inductive load.  
For capacitive load, derate current by 20%.

| TYPE NUMBER  | R1200      | R1500 | R1600 | R1800 | R2000 | UNITS |
|--|------------|-------|-------|-------|-------|-------|
| Maximum Recurrent Peak Reverse Voltage   | 1200       | 1500  | 1600  | 1800  | 2000  | V     |
| Maximum RMS Voltage  | 840        | 1050  | 1120  | 1260  | 1400  | V     |
| Maximum DC Blocking Voltage  | 1200       | 1500  | 1600  | 1800  | 2000  | V     |
| Maximum Average Forward Rectified Current  |            |       |       |       | 200   | mA    |
| .375"(9.5mm) Lead Length at Ta=50°C  | 500        |       |       |       |       |       |
| Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method) | 30         |       |       |       |       | A     |
| Maximum Instantaneous Forward Voltage at 0.5A D.C.   | 2.0        |       |       |       | 3.0   | V     |
| Maximum DC Reverse Current Ta=25°C   | 5.0        |       |       |       |       | μA    |
| at Rated DC Blocking Voltage Ta=100°C  | 50         |       |       |       |       | μA    |
| Typical Junction Capacitance (Note 1)  | 30         |       |       |       |       | pF    |
| Operating and Storage Temperature Range Tj, Tstg   | -65 — +150 |       |       |       |       | °C    |

#### NOTES:

1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.

## RATING AND CHARACTERISTIC CURVES (R1200 THRU R2000)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

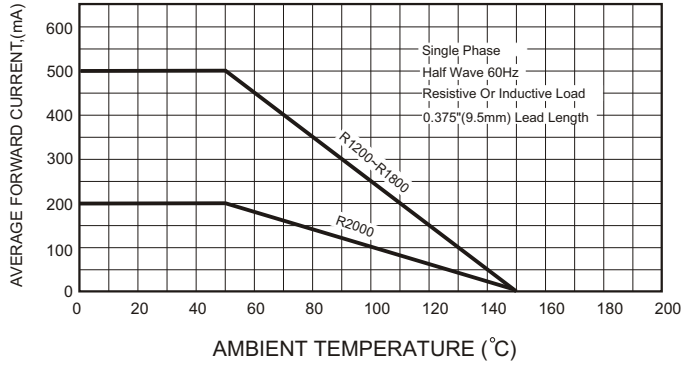


FIG.2 - TYPICAL REVERSE CHARACTERISTICS

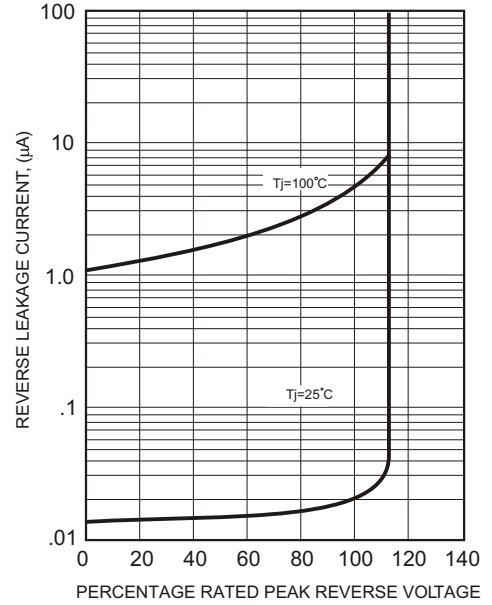


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

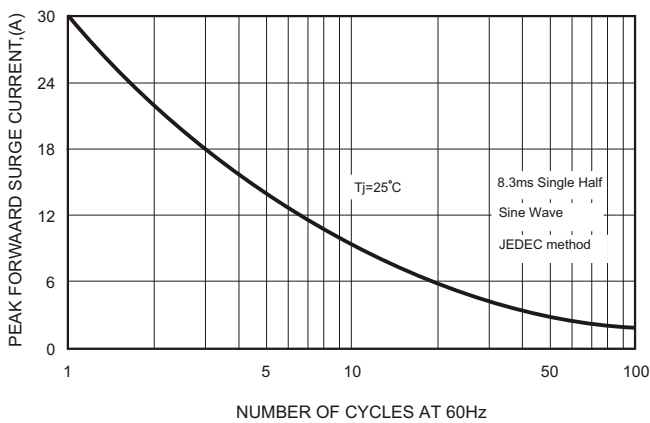


FIG.4-TYPICAL JUNCTION CAPACITANCE

