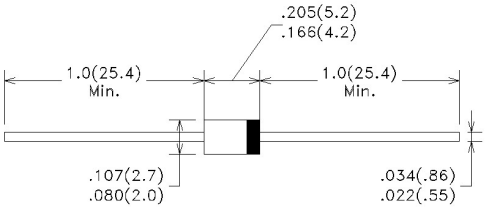
# R2000F thru R4000F

Axial Fast Recovery High Voltage Rectifier

Package Outline Dimensions in mm (inches)

DO-41






## Features

- High recovery voltage
- Low forward voltage drop
- Fast Recovery times for high efficiency
- Low leakage current
- High forward surge capability
- Meets MSL level 1, per J-STD-020, LF maximum peak of 260 °C
- Compliant to RoHS Directive 2002/95/EC and in accordance to WEEE 2002/96/EC

## Typical Applications

- For use in switching power Supplies.

## Mechanical Data

- Case:DO-41 Plastic Package
- Polarity:Color band denotes cathode end

## Maximum ratings

Ratings at TA=25℃ (unless otherwise specified)

| Parameter | Symbol | R2000F | R3000F | R4000F | Unit |
|---|---|---|---|---|---|
| Maximum recurrent peak reverse voltage | $V_{RRM}$ | 2000 | 3000 | 4000 | V |
| Maximum RMS voltage | $V_{RMS}$ | 1400 | 2100 | 2800 | V |
| Maximum DC blocking voltage | $V_{DC}$ | 2000 | 3000 | 4000 | V |
| Maximum average forward rectified current | $I_{F(AV)}$ | 0.5 | 0.2 | | A |
| Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load | $I_{FSM}$ | 25 | | | A |
| Storage temperature range | $T_S$ | -55 ~ 150 | | | °C |
| Operating Junction temperature range | Tj | -55 ~ 125 | | | °C |

## Electrical characteristics

Ratings at TA=25℃ (unless otherwise specified)

| Parameter | Test Conditions | Symbol | R2000F | R3000F thur R4000F | Unit |
|---|---|---|---|---|---|
| Maximum forward voltage | IF=0.5A | VF | 2.5 | - | V |
| | IF=0.2A | | - | 4.0 | |
| Maximum DC reverse current at rated DC blocking voltage | TA=25°C | IR | 5.0 | | μA |
| | TA=100°C | | 200 | | |
| Maximum Reverse Recovery Time | RG1 | Trr | 500 | | ns |

## Characteristics Curves

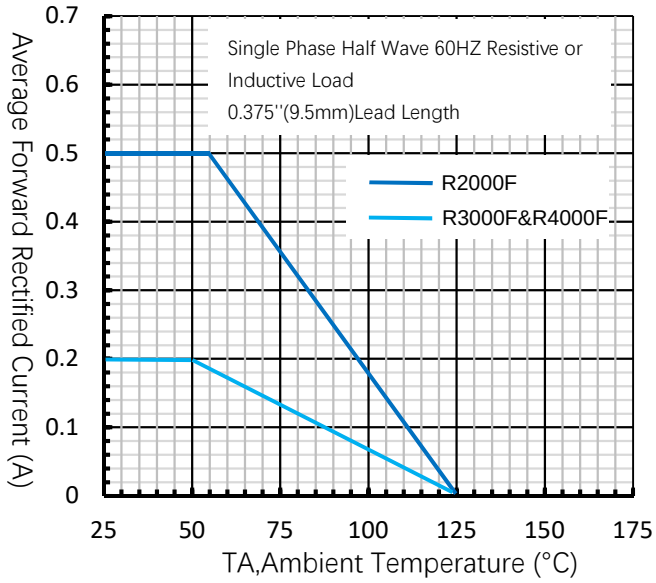



**Fig.1 Forward Current Derating Curve**

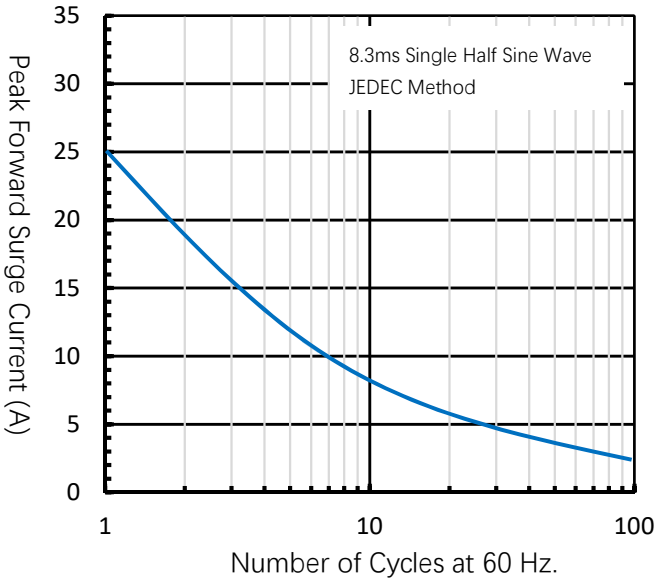



**Fig.2 Forward Surge Current Capability**

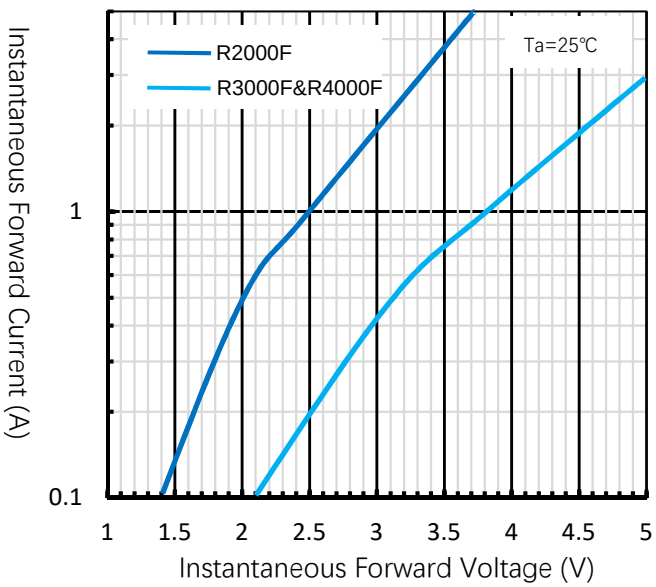



**Fig. 3 Typical Forward Characteristic**

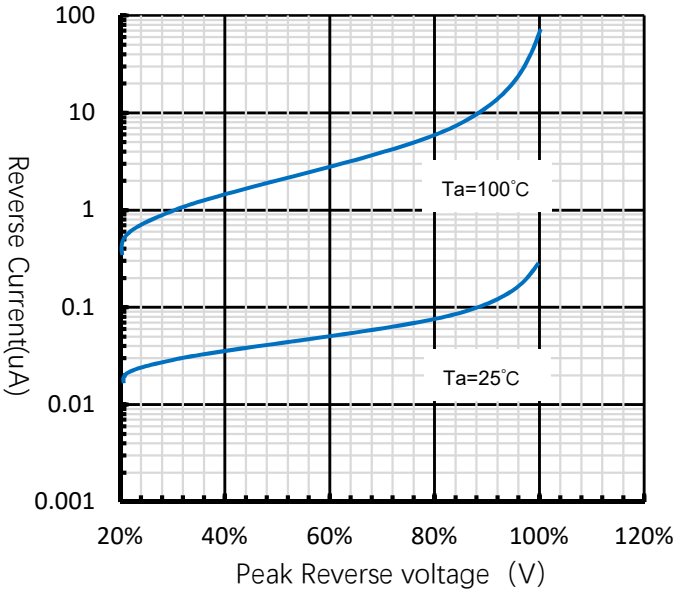



**Fig. 4 Typical Reverse Characteristics**