

**VOLTAGE RANGE: 2500 - 4000V**

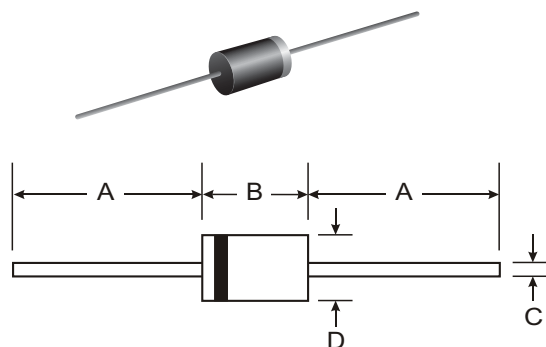
**CURRENT: 0.2 A**

### Features

- Low cost
- Low leakage
- Low forward voltage drop
- High current capability
- Easily cleaned with alcohol, Isopropanol and similar solvents

### Mechanical Data

- Case: DO-41 Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band
- Weight: 0.34 grams (approx.)
- Mounting Position: Any
- Marking: Type Number



| DO-41                |       |       |
|----------------------|-------|-------|
| 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 |       |       |

### Maximum Ratings and Electrical Characteristics T<sub>A</sub> = 25°C unless otherwise specified

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

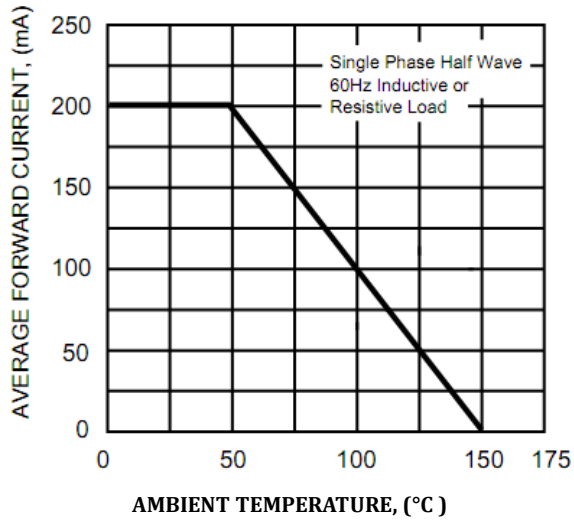
| Characteristic                                                                                                  |                          | Symbols                           | RFC2K       | RFC3K | RFC4K | Units |
|-----------------------------------------------------------------------------------------------------------------|--------------------------|-----------------------------------|-------------|-------|-------|-------|
| Peak Repetitive Reverse Voltage                                                                                 |                          | V <sub>RRM</sub>                  |             |       |       |       |
| Working Peak Reverse Voltage                                                                                    |                          | V <sub>RWM</sub>                  | 2000        | 3000  | 4000  | V     |
| DC Blocking Voltage                                                                                             |                          | V <sub>R</sub>                    |             |       |       |       |
| RMS Reverse Voltage                                                                                             |                          | V <sub>R(RSM)</sub>               | 1400        | 2100  | 2800  | V     |
| Average Output Current (Note 1)                                                                                 | @ T <sub>L</sub> = 50°C  | I <sub>O</sub>                    | 200         |       |       | mA    |
| Non-Repetitive Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method) |                          | I <sub>FSM</sub>                  | 30          |       |       | A     |
| Forward Voltage                                                                                                 | @ I <sub>F</sub> = 200mA | V <sub>FM</sub>                   | 4.0         | 5.0   | 6.5   | V     |
| Peak Reverse Leakage Current at Rated DC Blocking Voltage                                                       | @ T <sub>A</sub> =25°C   | I <sub>RM</sub>                   | 5.0         |       |       | uA    |
|                                                                                                                 | @ T <sub>A</sub> =100°C  |                                   | 100         |       |       |       |
| Typical Junction Capacitance (Note 2)                                                                           |                          | C <sub>J</sub>                    | 30          |       |       | pF    |
| Maximum Reverse Recovery Time (Note 3)                                                                          |                          | T <sub>RR</sub>                   | 500         |       |       | nS    |
| Operating and Storage Temperature Range                                                                         |                          | T <sub>J</sub> , T <sub>STG</sub> | -65 to +150 |       |       | °C    |

**Notes:** 1. Valid provided that leads are kept at ambient temperature at a distance of 9.5mm from the case.

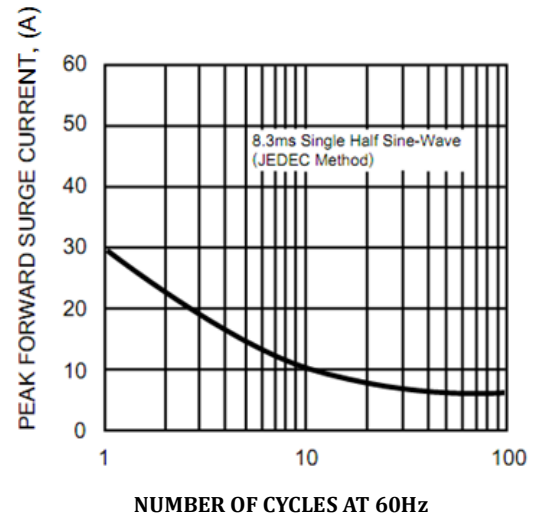
2. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.

3. Test Conditions: I<sub>F</sub> = 0.5A, I<sub>R</sub> = 1.0A, I<sub>RR</sub> = 0.25A

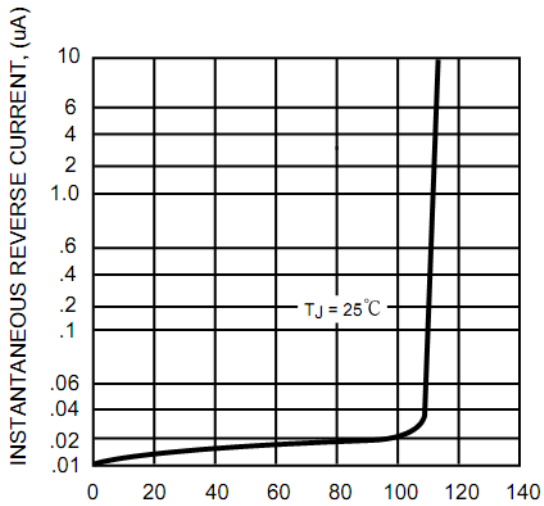
**TYPICAL FORWARD CURRENT  
DERATING CURVE**



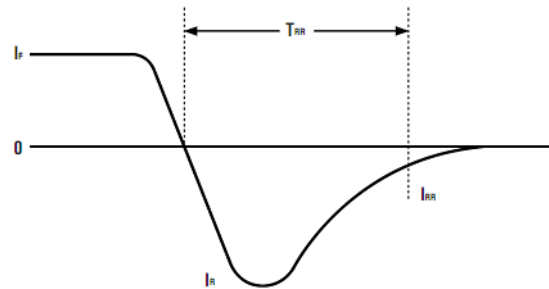
**MAXIMUM NON-REPETITIVE FORWARD  
SURGE CURRENT**



**TYPICAL REVERSE CHARACTERISTICS**  
PERCENT OF RATED PEAK REVERSE VOLTAGE, (%)



**REVERSE RECOVERY MEASUREMENT WAVEFORM**



Typical data capture points:  $I_F = 0.5I_R$ ,  $I_R, I_{RR} = 0.25I_R$   
 $I_R$  is typically the rated average forward current maximum ( $I_{FAVM}$ ) of the D.U.T