

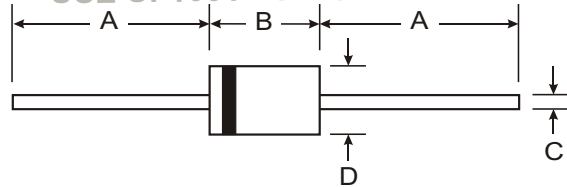
### Features

- Low Leakage
- Low Forward Voltage Drop
- High Current Capability
- High Speed Switching
- Plastic Material: UL Flammability Classification Rating 94V-0

### Mechanical Data

- Case: DO-41, Molded Plastic
- Terminals: Plated Axial Leads, Solderable per MIL-STD-202, Method 208
- Polarity: Color Band Denotes Cathode
- Mounting Position: Any
- Weight: 0.35 grams (approx.)

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| DO-41                |      |      |
|----------------------|------|------|
| Dim                  | Min  | Max  |
| A                    | 25.4 | —    |
| B                    | 4.1  | 5.2  |
| C                    | 0.71 | 0.86 |
| D                    | 2.0  | 2.7  |
| All Dimensions in mm |      |      |

### Maximum Ratings and Electrical Characteristics

Ratings at 25 °C ambient temperature unless otherwise specified.  
Single phase, half wave, 60Hz, resistive or inductive load.

| Characteristic  | Symbol         | HER 101     | HER 102 | HER 103 | HER 104 | HER 105 | HER 106 | Units |
|---|----------------|-------------|---------|---------|---------|---------|---------|-------|
| Maximum Recurrent Peak Reverse Voltage  | $V_{RRM}$      | 50          | 100     | 200     | 300     | 400     | 600     | V     |
| Maximum RMS Voltage   | $V_{RMS}$      | 35          | 70      | 140     | 210     | 280     | 420     | V     |
| Maximum DC Blocking voltage   | $V_{DC}$       | 50          | 100     | 200     | 300     | 400     | 600     | V     |
| Maximum Average Forward Rectified Current<br>9.5mm Lead Length @ $T_A = 50\text{ }^{\circ}\text{C}$ | $I_{(AV)}$     | 1.0         |         |         |         |         |         | A     |
| Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)    | $I_{FM}$       | 30          |         |         |         |         |         | A     |
| Maximum Instantaneous Forward Voltage @ 1.0A DC   | $V_F$          | 1.1         |         |         |         |         | 1.75    | V     |
| Maximum DC Reverse Current at Rated DC Blocking Voltage   | $I_R$          | 5.0         |         |         |         |         |         | A     |
| Maximum DC Reverse Current at Rated DC Blocking Voltage @ $T_A = 150\text{ }^{\circ}\text{C}$       | $I_R$          | 100         |         |         |         |         |         | A     |
| Maximum Reverse Recovery Time (Note 1)  | $t_{rr}$       | 50          |         |         |         |         | 100     | ns    |
| Typical Junction Capacitance (Note 2)   | $C_j$          | 20          |         |         |         |         |         | pF    |
| Operating and Storage Temperature Range   | $T_j, T_{STG}$ | -65 to +150 |         |         |         |         |         | °C    |

- Notes: 1. Reverse Recovery Test Conditions:  $I_F = 0.5\text{A}$ ,  $I_R = 1.0\text{A}$ ,  $I_{rr} = 0.25\text{A}$   
2. Measured at 1.0MHz and applied reverse voltage of 4.0V.

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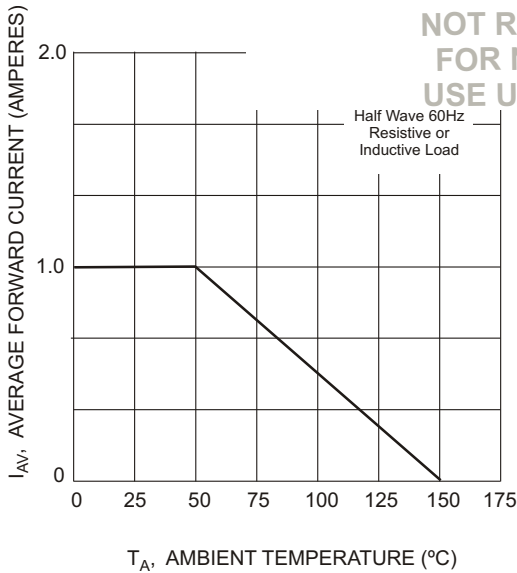


Fig. 1 Typical Forward Current Derating Curve

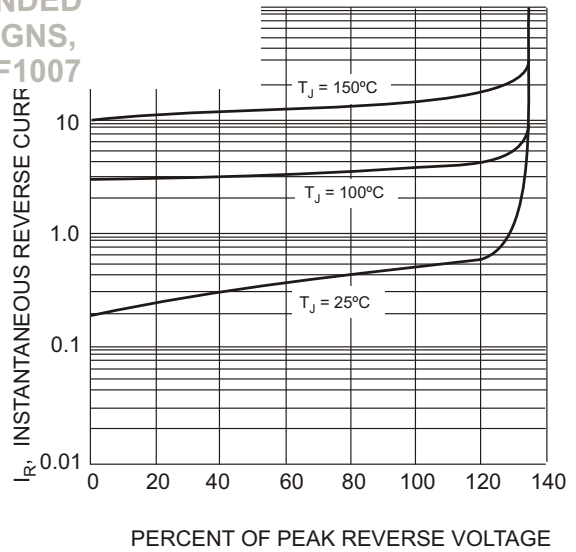


Fig. 2 Typical Reverse Characteristics

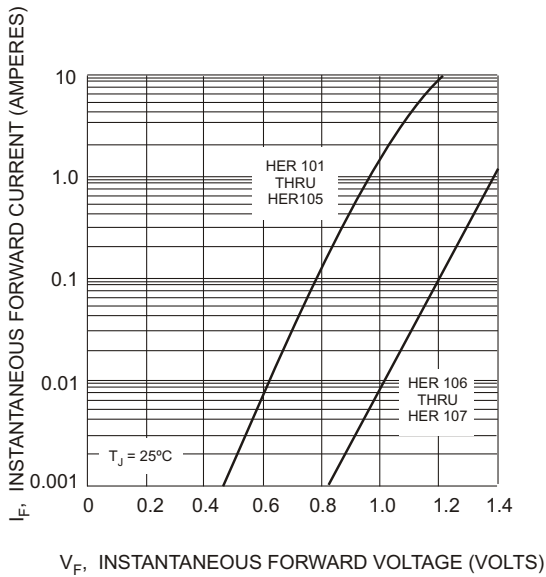


Fig. 3 Typical Instantaneous Forward Characteristics

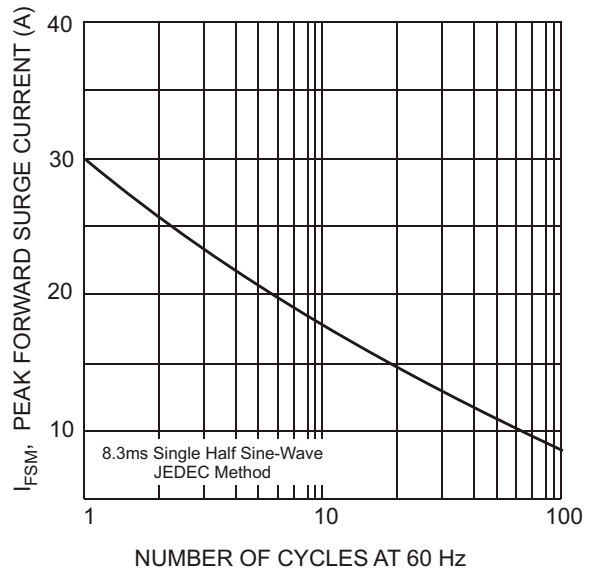


Fig. 4 Max Non-Repetitive Peak Fwd Surge Current (A)

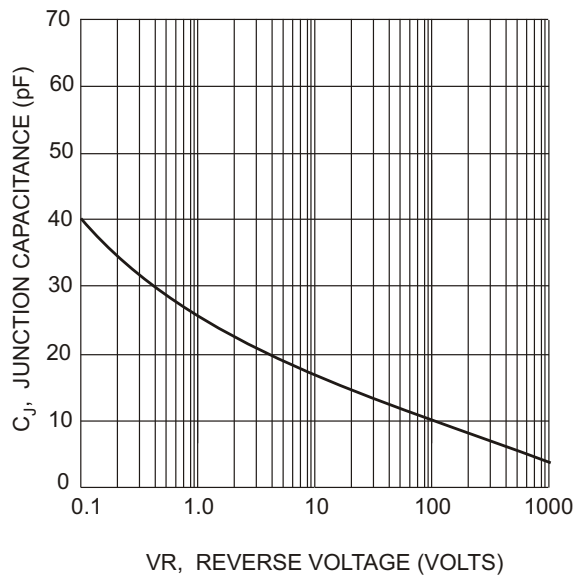


Fig. 5 Typical Junction Capacitance

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