

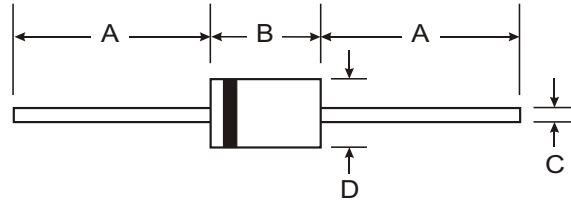
Features

- 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.)

NOT RECOMMENDED FOR NEW DESIGNS,
USE UF1001 - UF1007



| 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 9.5mm Lead Length @ $T_A = 50^\circ\text{C}$ | $I_{(AV)}$ | 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 | | | | | | μA |
| Maximum DC Reverse Current at Rated DC Blocking Voltage @ $T_A = 150^\circ\text{C}$ | I_R | 100 | | | | | | μA |
| 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 | | | | | | $^\circ\text{C}$ |

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.

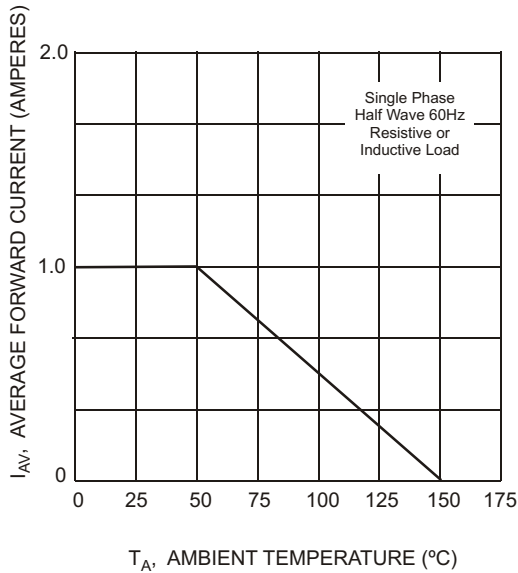


Fig. 1 Typical Forward Current Derating Curve

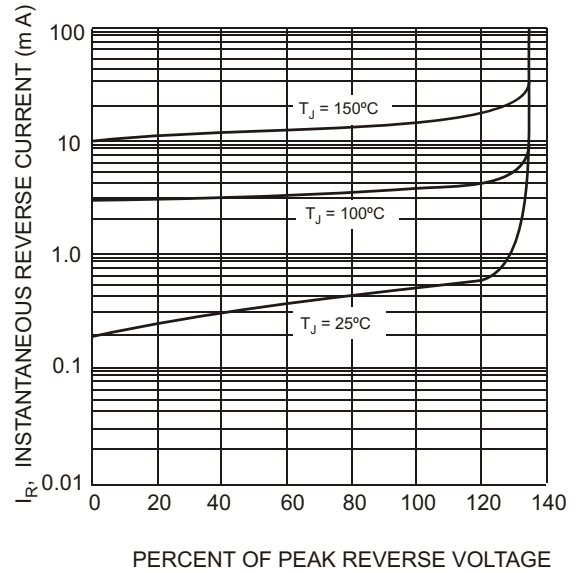


Fig. 2 Typical Reverse Characteristics

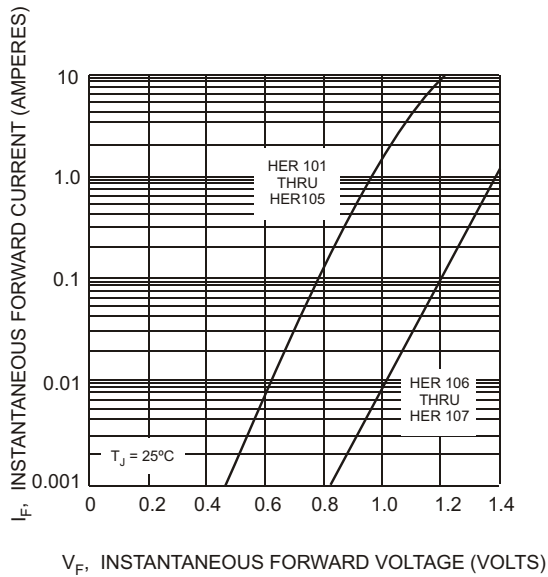


Fig. 3 Typical Instantaneous Forward Characteristics

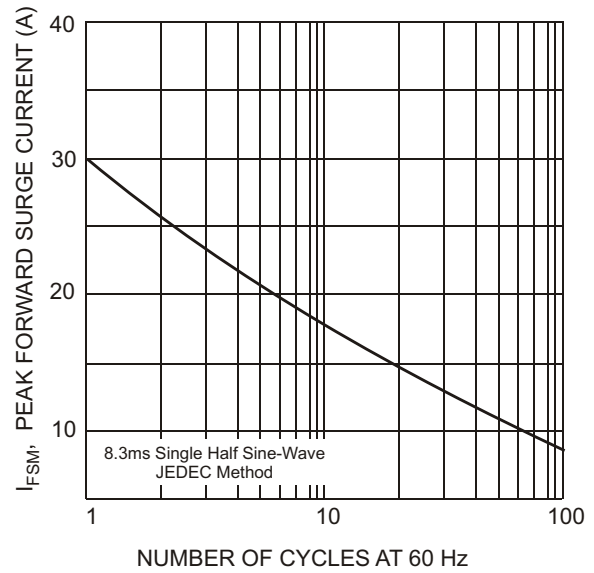


Fig. 4 Max Non-Repetitive Peak Fwd Surge Current (A)

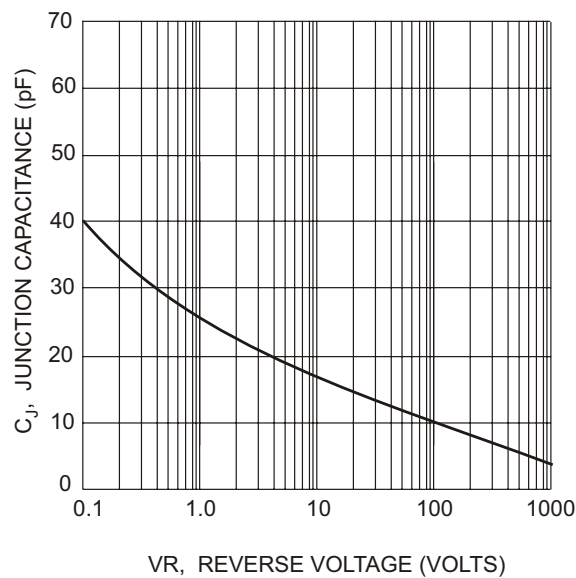


Fig. 5 Typical Junction Capacitance