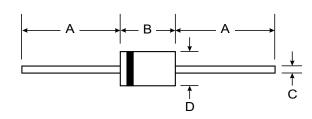


HER101 - HER106

1.0A HIGH EFFICIENCY RECTIFIER

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.)

| DO-41 | | | | | | | |
|----------------------|------|------|--|--|--|--|--|
| Dim | Min | Max | | | | | |
| Α | 25.4 | _ | | | | | |
| В | 4.1 | 5.2 | | | | | |
| С | 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 | ٧ |
| Maximum DC Blocking voltage | V _{DC} | 50 | 100 | 200 | 300 | 400 | 600 | ٧ |
| | I _(AV) | 1.0 | | | | | Α | |
| Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC method) | I _{FM} | 30 | | | | | Α | |
| Maximum Instantaneous Forward Voltage @ 1.0A DC | VF | 1.1 1.75 | | | | 1.75 | V | |
| Maximum DC Reverse Current at Rated DC Blocking Voltage | I _R | 5.0 | | | | | μА | |
| Maximum DC Reverse Current at Rated DC Blocking Voltage @ T _A = 150°C | I _R | 100 | | | | | μА | |
| Maximum Reverse Recovery Time (Note 1) | t _{rr} | | | 50 | | | 100 | ns |
| Typical Junction Capacitance (Note 2) | | 20 | | | | | | pF |
| Operating and Storage Temperature Range | T _j , T _{STG} | | | -65 to | +150 | | | °C |

Notes:

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

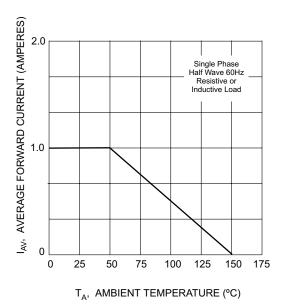
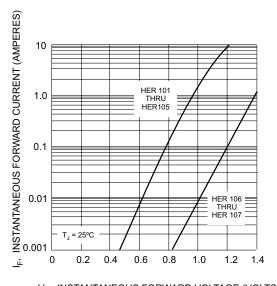
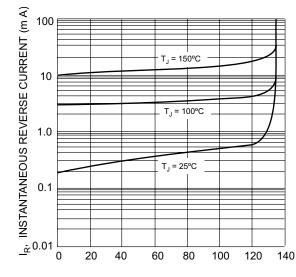


Fig. 1 Typical Forward Current Derating Curve



 ${\sf V_F},\ {\sf INSTANTANEOUS}\ {\sf FORWARD}\ {\sf VOLTAGE}\ ({\sf VOLTS})$

Fig. 3 Typical Instantaneous Forward Characteristics



PERCENT OF PEAK REVERSE VOLTAGE

Fig. 2 Typical Reverse Characteristics

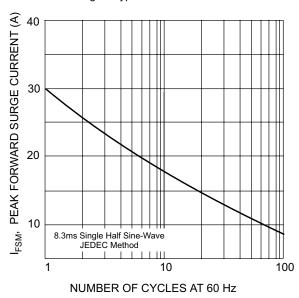
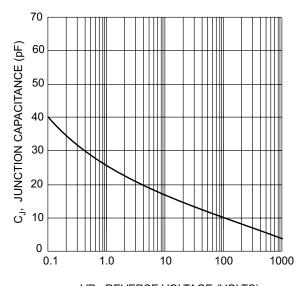


Fig. 4 Max Non-Repetitive Peak Fwd Surge Current (A)



VR, REVERSE VOLTAGE (VOLTS)

Fig. 5 Typical Junction Capacitance