

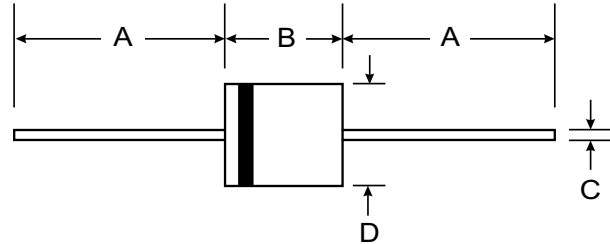


THE DATASHEET OF HER603-T



Features

- High Surge Current Capability
- Low Leakage and Forward Voltage Drop
- Plastic Material - UL Flammability Classification 94V-0
- Low Power Loss, High Efficiency



Mechanical Data

- Case: Molded Plastic
- Terminals: Axial Leads, Solderable per MIL-STD-202, Method 208
- Polarity: Color Band Indicates Cathode
- Approx. Weight: 1.7 grams
- Mounting Position: Any

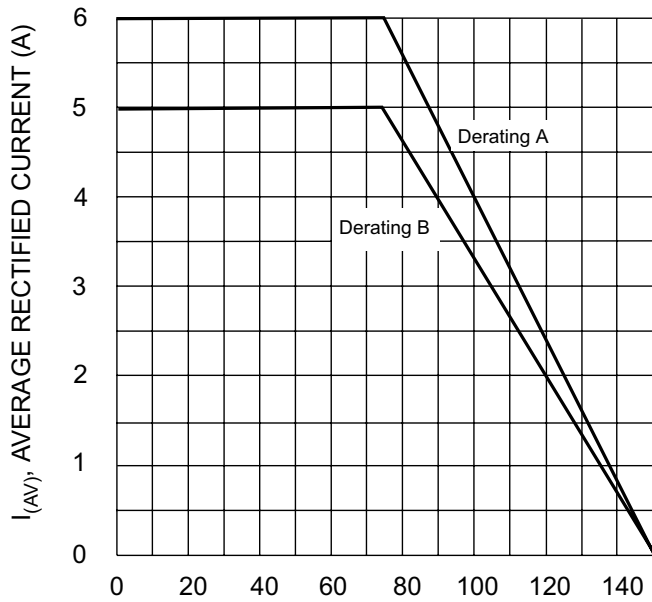
| R-6 | | |
|----------------------|------|-----|
| Dim | Min | Max |
| A | 25.4 | — |
| B | 8.6 | 9.1 |
| C | 1.2 | 1.3 |
| All Dimensions in mm | | |

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 | HER601 | HER602 | HER603 | HER604 | Units |
|--|-----------------|-------------|--------|--------|--------|------------------|
| Maximum Recurrent Peak Reverse Voltage | V_{RRM} | 50 | 100 | 200 | 300 | V |
| Maximum RMS Voltage | V_{RSM} | 35 | 70 | 140 | 210 | V |
| Maximum dc Blocking Voltage | V_{DC} | 50 | 100 | 200 | 300 | V |
| Maximum Average Forward Rectified Current (Fig. 1) | $I_{(AV)}$ | 6.0 | | | | A |
| Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load (JEDEC Method) | I_{FSM} | 250 | | | | A |
| Maximum Instantaneous Forward Voltage at 6.0A dc | V_F | 1.2 | | | | V |
| Maximum dc Reverse Current at Rated dc Blocking Voltage $T_A = 25^\circ\text{C}$ | I_R | 10 | | | | μA |
| Maximum Reverse Recovery Time (Note 1) | T_{RR} | 60 | | | | ns |
| Maximum Full Load Reverse Current Full Cycle Average 9.5mm lead length at $T_C = 55^\circ\text{C}$ | I_R | 150 | | | | μA |
| Typical Junction Capacitance (Note 2) | $R_{\theta JA}$ | 100 | | | | 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 1.0 MHz and applied reverse voltage of 4.0 volts.



T_A , AMBIENT TEMPERATURE ($^{\circ}C$)
Fig. 1, Forward Current Derating Curve

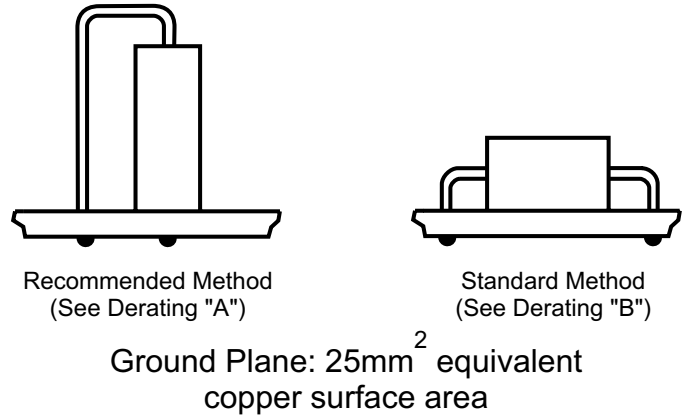


Fig. 2, Printed Circuit Board Mounting Method

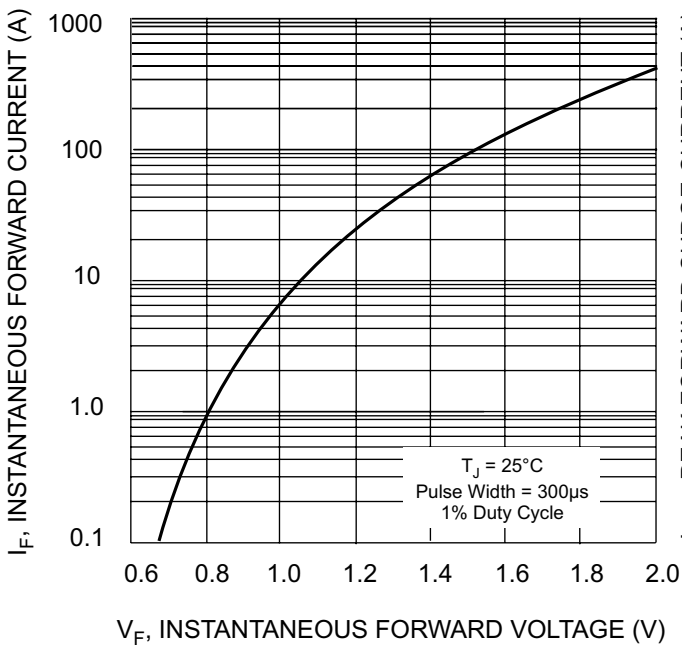


Fig. 3, Typical Forward Characteristics

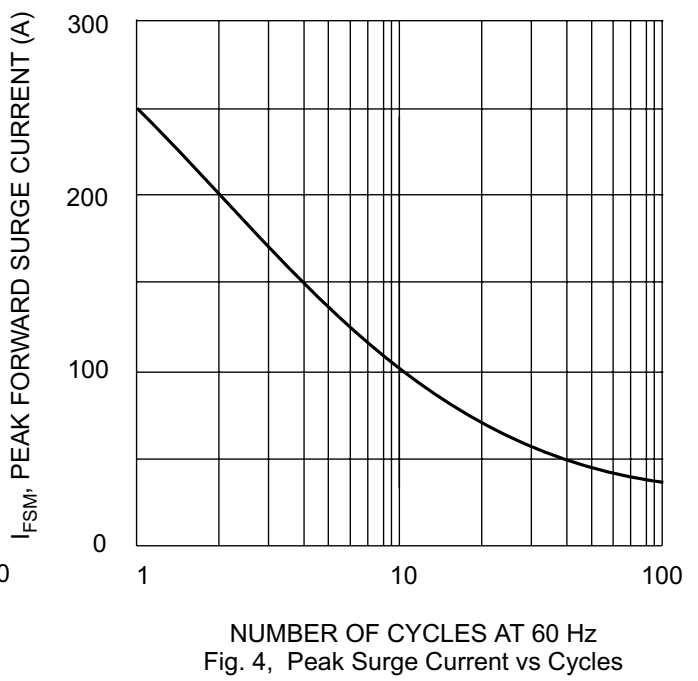




Fig. 4, Peak Surge Current vs Cycles

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