

# HER601 - HER604

## **6.0A HIGH EFFICIENCY RECTIFIER**

### **Features**

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

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## **Mechanical Data**

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

| R-6                  |      |     |  |  |  |
|----------------------|------|-----|--|--|--|
| Dim                  | Min  | Max |  |  |  |
| Α                    | 25.4 | _   |  |  |  |
| В                    | 8.6  | 9.1 |  |  |  |
| С                    | 1.2  | 1.3 |  |  |  |
| All Dimensions in mm |      |     |  |  |  |

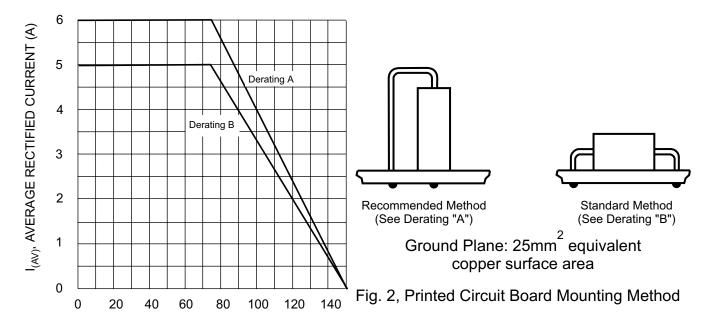
## **Maximum Ratings and Electrical Characteristics**

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  |                  | 50          | 100    | 200    | 300    | ٧     |
| Maximum RMS Voltage   | VRSM             | 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         |        |        |        | Α     |
| Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load (JEDEC Method) | I <sub>FSM</sub> | 250         |        |        | Α      |       |
| Maximum Instantaneous Forward Voltage at 6.0Adc   | VF               | 1.2         |        |        |        | ٧     |
| Maximum dc Reverse Current at Rated dc Blocking Voltage T <sub>A</sub> = 25°C                     |                  | 10          |        |        |        |       |
| Maximum Reverse Recovery Time (Note 1)  |                  | 60          |        |        |        |       |
| Maximum Full Load Reverse Current Full Cycle Average 9.5mm lead length at TC = 55°C               | I <sub>R</sub>   | 150         |        |        | μA     |       |
| Typical Junction Capacitance (Note 2)   |                  | 100         |        |        |        |       |
| Operating and Storage Temperature Range   |                  | -65 to +150 |        |        |        |       |

Notes: 1. Reverse Recovery Test Conditions: IF =0.5 A, IR =1.0 A, IRR=0.25A

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



T<sub>A</sub>, AMBIENT TEMPERATURE (°C)
Fig. 1, Forward Current Derating Curve

