



# HER101G~HER108G

## 1.0Amp High Efficiency Silicon Rectifiers

DO-41



### Features

- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- Open Junction chip
- Low reverse leakage
- High forward surge current capability
- High temperature soldering guaranteed  
250°C/10 seconds at terminals

### Mechanical Data

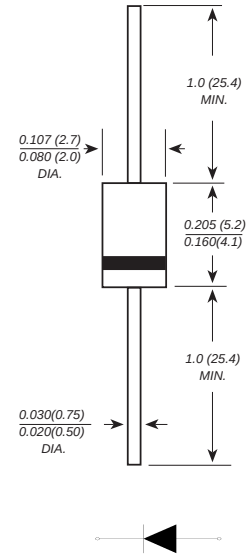
**Case** : Molded plastic body

**Terminals** : Solder plated, solderable per MIL-STD-750, Method 2026

**Polarity** : Polarity symbol marking on body

**Mounting Position** : Any

**Weight** : 0.0088 ounce, 0.25 grams



Dimensions in inches and (millimeters)

### Maximum Ratings And Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified. Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%.

| Parameter                                                                                                   | SYMBOLS                          | HER 101G    | HER 102G | HER 103G | HER 104G | HER 105G | HER 106G | HER 107G | HER 108G | UNITS |
|-------------------------------------------------------------------------------------------------------------|----------------------------------|-------------|----------|----------|----------|----------|----------|----------|----------|-------|
| Maximum repetitive peak reverse voltage                                                                     | V <sub>RRM</sub>                 | 50          | 100      | 200      | 300      | 400      | 600      | 800      | 1000     | V     |
| Maximum RMS voltage                                                                                         | V <sub>RMS</sub>                 | 35          | 70       | 140      | 210      | 280      | 420      | 560      | 700      | V     |
| Maximum DC blocking voltage                                                                                 | V <sub>DC</sub>                  | 50          | 100      | 200      | 300      | 400      | 600      | 800      | 1000     | V     |
| Maximum average forward rectified current at T <sub>L</sub> =100°C                                          | I <sub>(AV)</sub>                | 1.0         |          |          |          |          |          |          |          | A     |
| Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load                          | I <sub>FSM</sub>                 | 35.0        |          |          |          |          |          |          |          | A     |
| Maximum instantaneous forward voltage at 1.0A                                                               | V <sub>F</sub>                   | 1.0         |          |          |          | 1.4      | 1.7      |          |          | V     |
| Maximum DC reverse current    T <sub>A</sub> =25°C<br>at rated DC blocking voltage    T <sub>A</sub> =125°C | I <sub>R</sub>                   | 10.0<br>500 |          |          |          |          |          |          |          | μA    |
| Maxinum reverse recovery time(Note 1)                                                                       | T <sub>rr</sub>                  | 50          |          |          |          |          | 75       |          |          | ns    |
| Typical junction capacitance (Note2)                                                                        | C <sub>J</sub>                   | 25.0        |          |          |          |          |          |          |          | pF    |
| Typical thermal resistance                                                                                  | R <sub>qJA</sub>                 | 65.0        |          |          |          |          |          |          |          | °C/W  |
| Operating junction and storage temperature range                                                            | T <sub>J</sub> ,T <sub>STG</sub> | -55 to +150 |          |          |          |          |          |          |          | °C    |

**Note:** 1.Reverse recovery time test condition:  $I_F=0.5\text{A}$   $I_R=1.0\text{A}$   $I_{rr}=0.25\text{A}$   
2.Measured at 1MHz and applied reverse voltage of 4.0V D.C.



### Ratings And Characteristic Curves

FIG. 1- DERATING CURVE OUTPUT RECTIFIED CURRENT

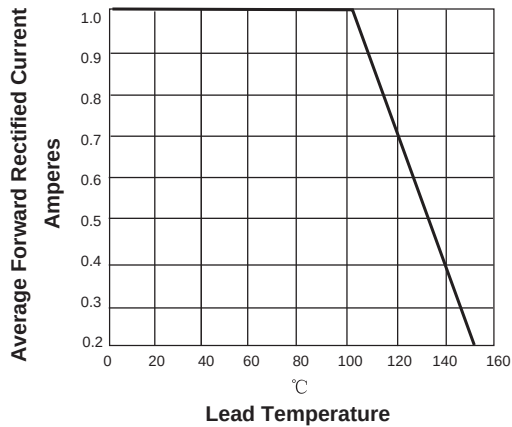


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG

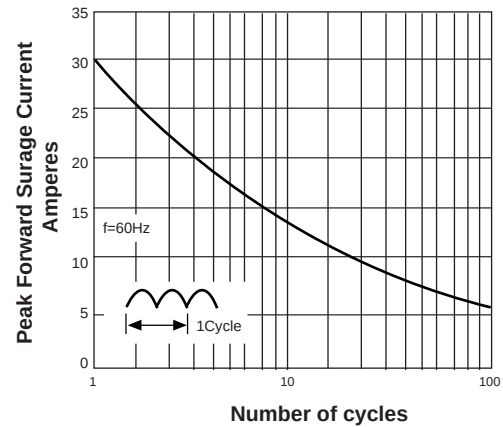


FIG. 3-TYPICAL FORWARD VOLTAGE CHARACTERISTICS

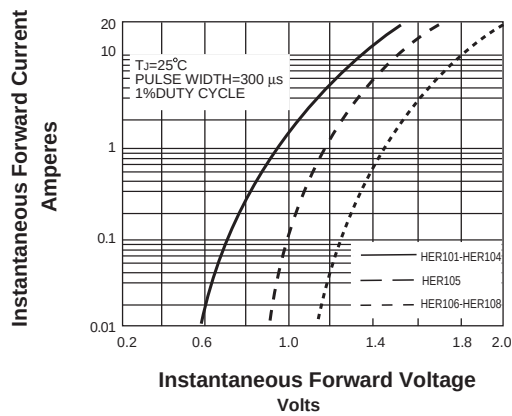


FIG. 4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS

