

## HER201 THRU HER208

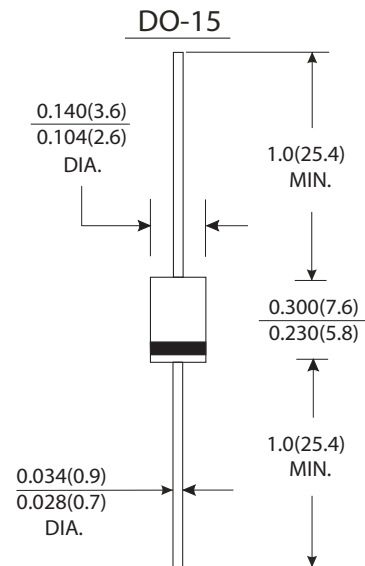
CURRENT 2.0 Amperes  
VOLTAGE 50 to 1000 Volts

### Features

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Low forward voltage drop
- High current capability
- High reliability
- Low power loss, high efficiency
- High surge current capability
- High speed switching
- Low leakage

### Mechanical Data

- Case : JEDEC DO-15 molded plastic body
- Epoxy : UL94V-0 rate flame retardant
- Lead : Plated axial lead solderable per MIL-STD-750, method 2026
- Polarity : Color band denotes cathode end
- Mounting Position : Any
- Weight : 0.014 ounce, 0.39 gram



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, derate by 20%)

|                                                                                                         | Symbols                            | HER 201     | HER 202 | HER 203 | HER 204 | HER 205 | HER 206 | HER 207 | HER 208 | Units |
|---------------------------------------------------------------------------------------------------------|------------------------------------|-------------|---------|---------|---------|---------|---------|---------|---------|-------|
| Maximum recurrent peak reverse voltage                                                                  | V <sub>RRM</sub>                   | 50          | 100     | 200     | 300     | 400     | 600     | 800     | 1000    | Volts |
| Maximum RMS voltage                                                                                     | V <sub>RMS</sub>                   | 35          | 70      | 140     | 210     | 280     | 420     | 560     | 700     | Volts |
| Maximum DC blocking voltage                                                                             | V <sub>DC</sub>                    | 50          | 100     | 200     | 300     | 400     | 600     | 800     | 1000    | Volts |
| Maximum average forward rectified current 0.375"(9.5mm) lead length @ at T <sub>A</sub> =50°C           | I <sub>(AV)</sub>                  | 2.0         |         |         |         |         |         |         |         | Amps  |
| Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)        | I <sub>FSM</sub>                   | 60.0        |         |         |         |         |         |         |         | Amps  |
| Maximum instantaneous forward voltage at 2.0A                                                           | V <sub>F</sub>                     | 1.0         |         |         | 1.3     |         | 1.7     |         |         | Volts |
| Maximum DC reverse current at rated DC blocking voltage                                                 | I <sub>R</sub>                     | 5.0         |         |         |         |         |         |         |         | μ A   |
| Maximum full load reverse current full cycle average. 0.375"(9.5mm) lead length at T <sub>L</sub> =55°C |                                    | 100         |         |         |         |         |         |         |         |       |
| Maximum reverse recovery time (Note 1)                                                                  | T <sub>rr</sub>                    | 50          |         |         |         |         | 75      |         |         | ns    |
| Typical junction capacitance (Note 2)                                                                   | C <sub>J</sub>                     | 30          |         |         |         |         | 20      |         |         | pF    |
| Operating junction and storage temperature range                                                        | T <sub>J</sub><br>T <sub>STG</sub> | -65 to +150 |         |         |         |         |         |         |         | °C    |

#### Notes:

(1) Test conditions: I<sub>F</sub>=0.5A, I<sub>R</sub>=1.0A, I<sub>rr</sub>=0.25A.

(2) Measured at 1MHz and applied reverse voltage of 4.0 Volts.

## RATINGS AND CHARACTERISTIC CURVES HER201 THRU HER208

FIG.1-TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTIC

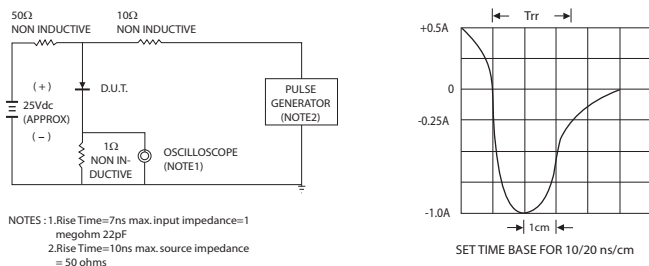


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

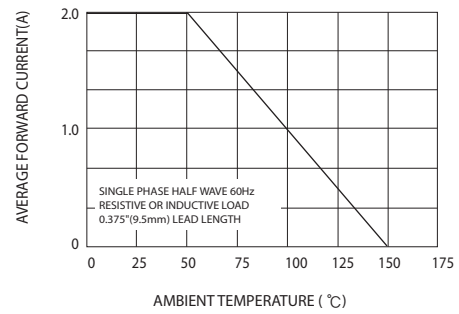


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

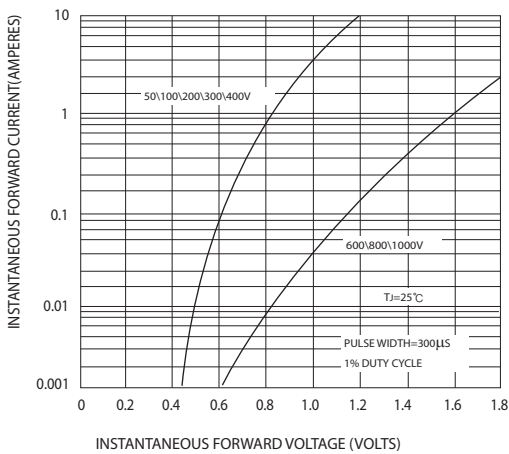


FIG.4-TYPICAL REVERSE CHARACTERISTICS

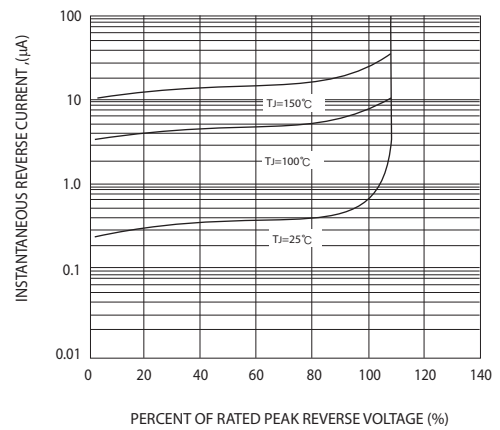


FIG.5-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

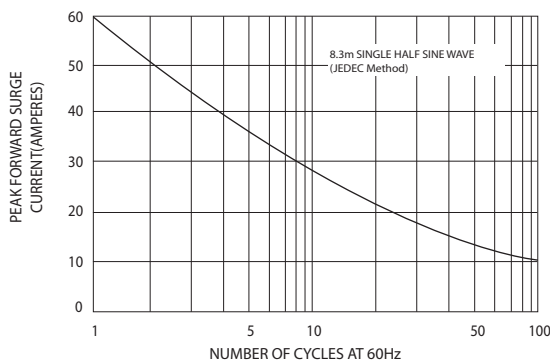


FIG.6-TYPICAL JUNCTION CAPACITANCE

