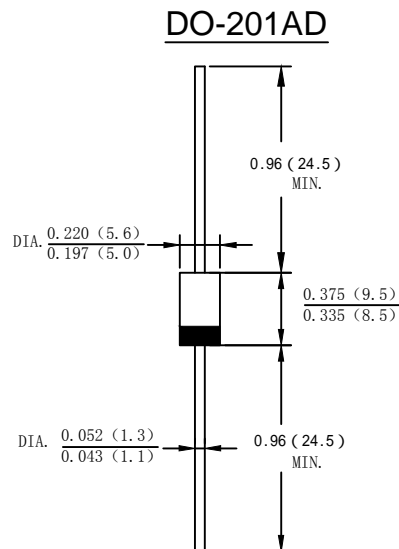


### Features

- Low forward voltage drop
- High current capability
- High reliability
- High surge current capability
- Plastic material-UL flammability 94V-0

### Mechanical Data

- Case: Molded plastic DO-201AD
- Terminals: Plated leads solderable per MIL-STD-202, Method 208 guaranteed
- Polarity: Color band denotes cathode end
- Mounting Position: Any
- Marking: Type Number
- Lead Free: For RoHS/Lead Free Version



### Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified

Single phase, half wave, 60Hz, resistive or inductive load

For capacitive load derate current by 20%

| Type Number  | SYMBOL             | HER 301G    | HER 302G | HER 303G | HER 304G | HER 305G | HER 306G | HER 307G | HER 308G | Unit             |
|--|--------------------|-------------|----------|----------|----------|----------|----------|----------|----------|------------------|
| Maximum Recurrent 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      | 630      | 700      | V                |
| Maximum DC Blocking Voltage  | V <sub>DC</sub>    | 50          | 100      | 200      | 300      | 400      | 600      | 800      | 1000     | V                |
| Maximum Average Forward Rectified Current.375"(9.5mm) lead length@T <sub>L</sub> =100°C          | I <sub>F(AV)</sub> | 3.0         |          |          |          |          |          |          |          | A                |
| Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method) | I <sub>FSM</sub>   | 125         |          |          |          |          |          |          |          | A                |
| I <sup>2</sup> t Rating for Fusing (t < 8.3ms)   | I <sup>2</sup> t   | 64.84       |          |          |          |          |          |          |          | A <sup>2</sup> s |
| Forward Voltage @I <sub>F</sub> =3.0A  | V <sub>FM</sub>    | 1.0         |          |          | 1.3      |          | 1.7      |          |          | V                |
| Peak Reverse Current @T <sub>A</sub> =25°C   | I <sub>R</sub>     | 5.0         |          |          |          |          |          |          |          | uA               |
| At Rated DC Blocking Voltage @T <sub>A</sub> =125°C  |                    | 100         |          |          |          |          |          |          |          |                  |
| Typical Junction Capacitance (Note 1)  | C <sub>J</sub>     | 50          |          |          |          |          | 30       |          |          | pF               |
| Typical Thermal Resistance Junction to Ambient(Note 2)   | R <sub>θJA</sub>   | 25          |          |          |          |          |          |          |          | °C/W             |
| Maximum Reverse Recovery Time(Note 3)  | T <sub>rr</sub>    | 50          |          |          |          |          | 75       |          |          | ns               |
| Operating Temperature Range  | T <sub>J</sub>     | -55 to +150 |          |          |          |          |          |          |          | °C               |
| /Storage Temperature Range   | T <sub>STG</sub>   | -55 to +150 |          |          |          |          |          |          |          | °C               |

Note: 1. Measured at 1.0 MHz and Applied reverse Voltage of 4.0V D.C

2. Leads maintained at ambient temperature at a distance of 9.5mm from the case

3. Reverse Recovery Test Conditions:  $I_F=0.5\text{A}$ ,  $I_R=1\text{A}$ ,  $I_{rr}=0.25\text{A}$

FIG.1- MAXIMUM AVERAGE FORWARD CURRENT DERATING

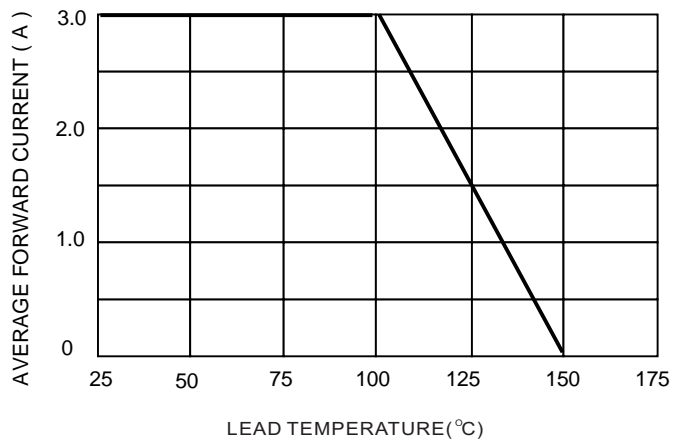


FIG.2- TYPICAL FORWARD CHARACTERISTICS

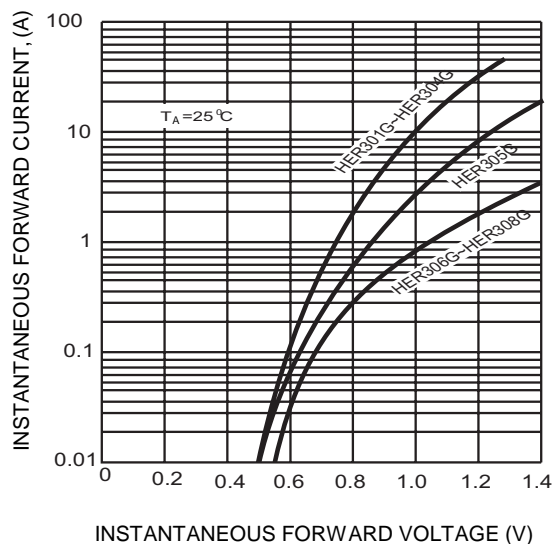


FIG.3- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

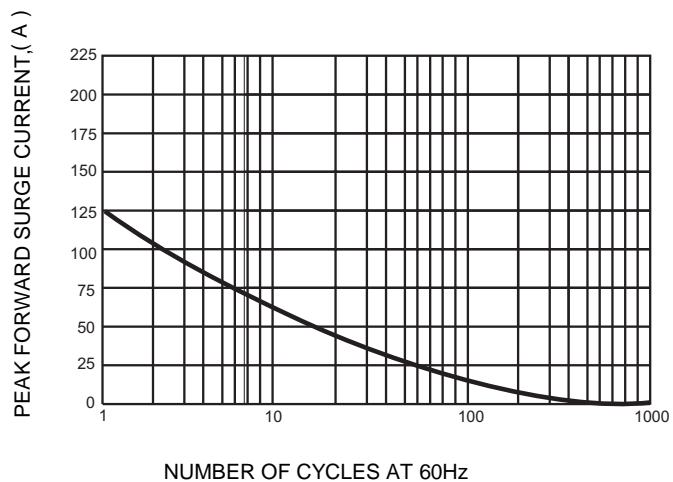
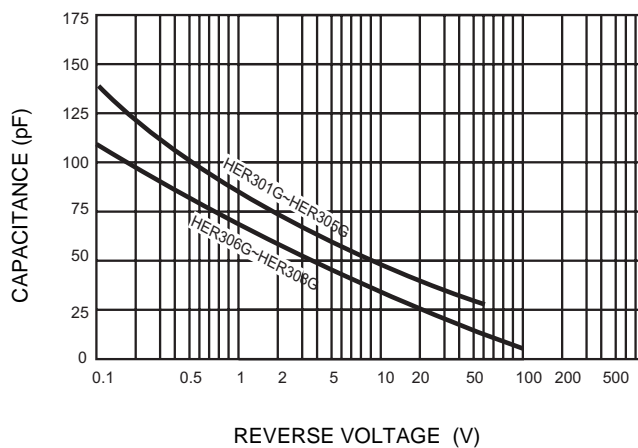


FIG.4- TYPICAL JUNCTION CAPACITANCE



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