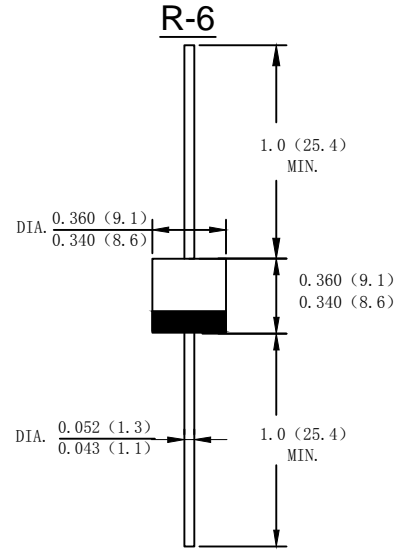


Features

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

Mechanical Data

- Case: Moulded plastic R-6
- 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



Dimensions in inches and (millimeters)

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 601G | HER 602G | HER 603G | HER 604G | HER 605G | HER 606G | HER 607G | HER 608G | Unit |
|--|-----------------|-------------|----------|----------|----------|----------|----------|----------|----------|---------------------------|
| Maximum Recurrent Peak Reverse Voltage | V_{RRM} | 50 | 100 | 200 | 300 | 400 | 600 | 800 | 1000 | V |
| Maximum RMS Voltage | V_{RMS} | 35 | 70 | 140 | 210 | 280 | 420 | 560 | 700 | V |
| Maximum DC Blocking Voltage | V_{DC} | 50 | 100 | 200 | 300 | 400 | 600 | 800 | 1000 | V |
| Maximum Average Forward Rectified Current. 375"(9.5mm) lead length @ $T_A=55^\circ\text{C}$ | I_o | 6.0 | | | | | | | | A |
| Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method) | I_{FSM} | 250 | | | | | | | | A |
| Forward Voltage @ $I_F=6.0\text{A}$ | V_{FM} | 1.0 | | 1.3 | | 1.7 | | | | V |
| Peak Reverse Current @ $T_A=25^\circ\text{C}$ | I_R | 5.0 | | | | | | | | uA |
| At Rated DC Blocking Voltage @ $T_A=100^\circ\text{C}$ | | 200 | | | | | | | | |
| Typical Junction Capacitance (Note 1) | C_J | 100 | | | | 65 | | | | pF |
| Typical Thermal Resistance Junction to Ambient (Note 2) | $R_{\theta JA}$ | 20 | | | | | | | | $^\circ\text{C}/\text{W}$ |
| Maximum Reverse Recovery Time (Note 3) | T_{rr} | 50 | | | | 75 | | | | ns |
| Operating Temperature Range | T_J | -55 to +150 | | | | | | | | $^\circ\text{C}$ |
| Storage Temperature Range | T_{STG} | -55 to +150 | | | | | | | | $^\circ\text{C}$ |

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 – FORWARD CURRENT DERATING CURVE

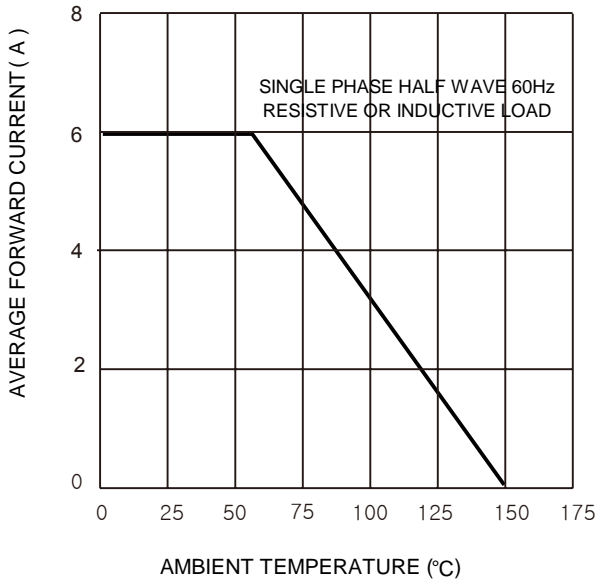


FIG.2-TYPICAL FORWARD CHARACTERISTICS

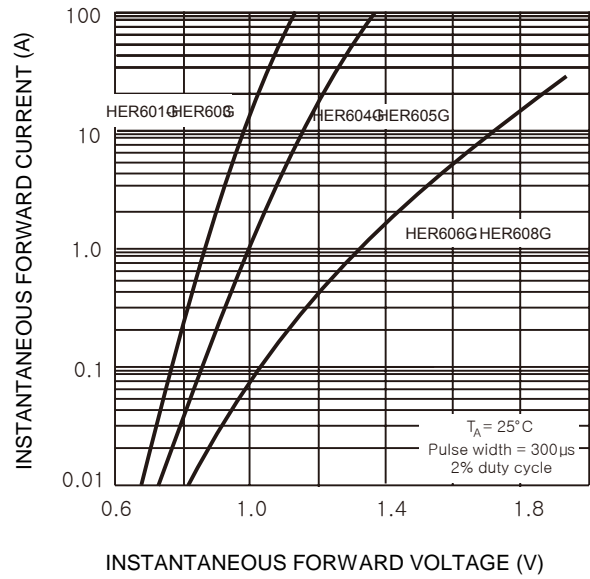


FIG. 3 – MAXIMUM NON-REPETITIVE SURGE CURRENT

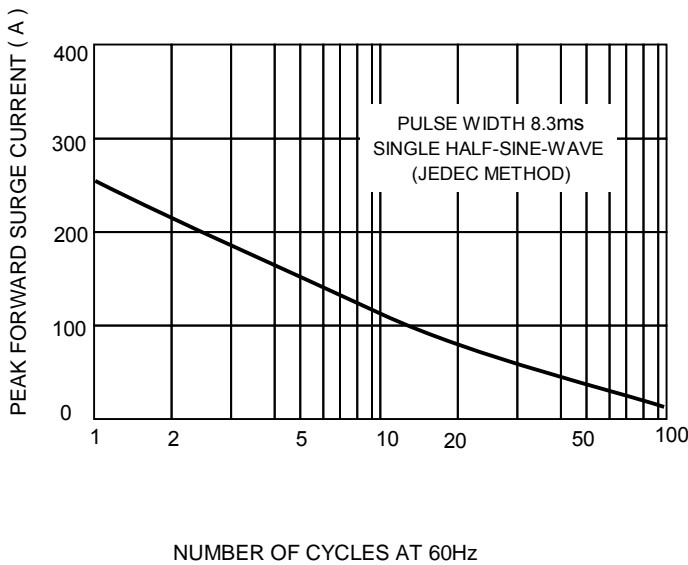


FIG.4 – TYPICAL JUNCTION CAPACITANCE

