

High Efficiency Glass Passivated Rectifier



Features

- Low cost
- Diffused junction
- Ultra fast switching for high efficiency
- Low reverse leakage current
- Low forward voltage drop
- High current capability
- The plastic material carries UL recognition 94V-0

Mechanical Data

| | |
|-------------------|-------------------------------|
| Case | : JEDEC DO-15 molded plastic |
| Polarity | : Colour band denotes cathode |
| Weight | : 0.015 ounces , 0.4 grams |
| Mounting Position | : Any |
| Reverse Voltage | : 100 to 300 Volts |
| Forward Current | : 2 Ampere |

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%.

| Characteristics | Symbol | HER202G+ | HER204G+ | Unit |
|---|-----------------|-------------|----------|--------------|
| Max. Recurrent Peak Reverse Voltage | V_{RRM} | 100 | 300 | V |
| Max. RMS Voltage | V_{RMS} | 70 | 210 | V |
| Max. DC Blocking Voltage | V_{DC} | 100 | 300 | V |
| Max. Average Forward Rectified Current @ $T_A = 50^\circ C$ | $I_{(AV)}$ | 2.0 | | A |
| Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load (JEDEC Method) | I_{FSM} | 60 | | A |
| Peak Forward Voltage at 2A DC | V_F | 1 | 1.3 | V |
| Maximum DC Reverse Current @ $T_J = 25^\circ C$ at Rated DC Blocking Voltage @ $T_J = 100^\circ C$ | I_R | 5 100 | | μA |
| Maximum Reverse Recovery Time (Note 1) | T_{rr} | 50 | | nS |
| Typical Junction Capacitance (Note 2) | C_J | 50 | | pF |
| Typical Thermal Resistance (Note 3) | $R_{\theta JA}$ | 25 | | $^\circ C/W$ |
| Operating Temperature Range | T_J | -55 to +150 | | $^\circ C$ |
| Storage Temperature Range | T_{STG} | -55 to +150 | | $^\circ C$ |

- Notes :**
1. Measured with $I_F = 0.5A$, $I_R = 1A$, $I_{RR} = 0.25A$
 2. Measured at 1MHz and applied reverse voltage of 4V DC
 3. Thermal resistance junction to ambient.
 4. The typical data above is for reference only

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Ratings and Characteristic Curves

FIG. 1 – FORWARD CURRENT DERATING CURVE

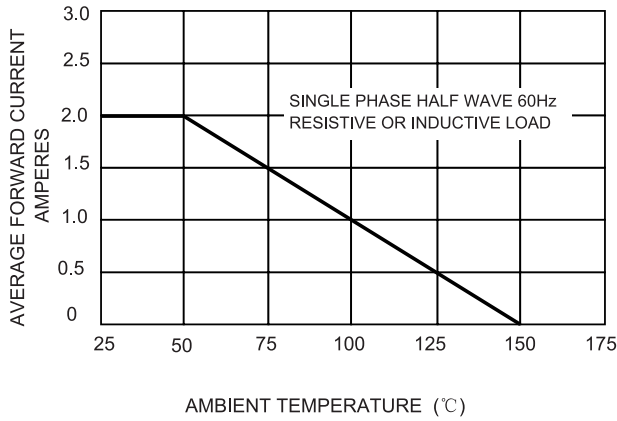


FIG. 2 – MAXIMUM NON-REPETITIVE SURGE CURRENT

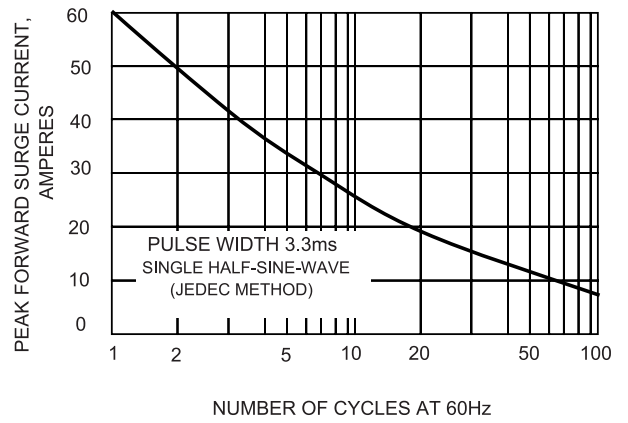


FIG. 3 – TYPICAL JUNCTION CAPACITANCE

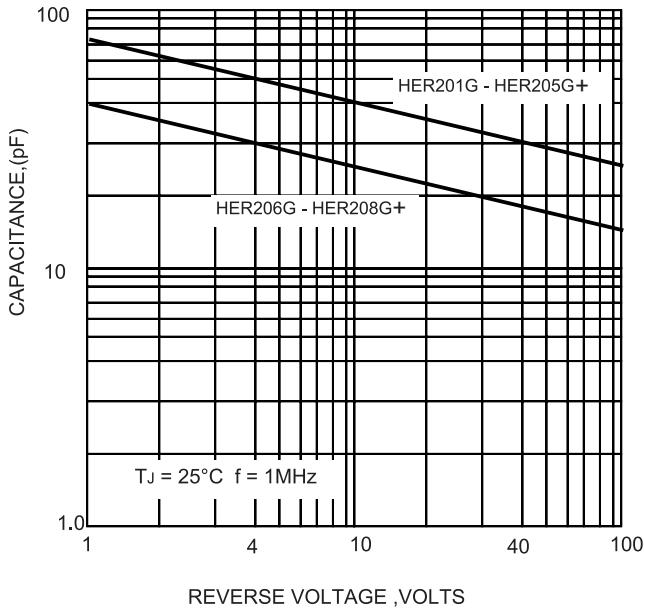
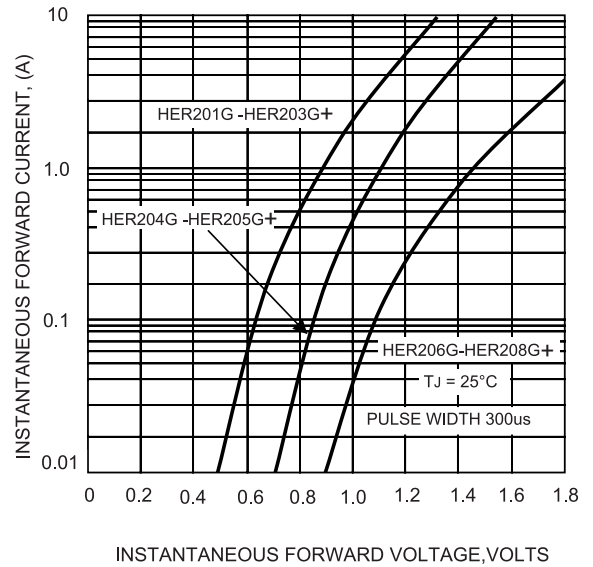


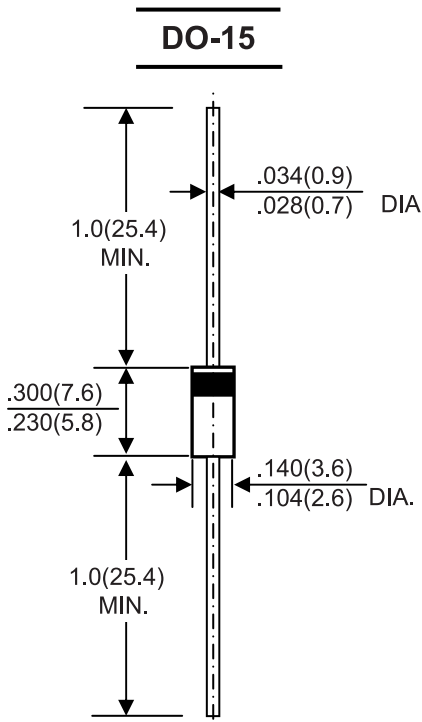
FIG.4-TYPICAL FORWARD CHARACTERISTICS



High Efficiency Glass Passivated Rectifier



Dimensions:



Dimensions : Inches (Millimetres)

Part Number Table

| Description | Part Number |
|--|-------------|
| High Efficiency Glass Passivated Rectifiers | HER202G+ |
| | HER204G+ |

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