

## Features

- Halogen Free Available Upon Request By Adding Suffix "-HF"
- Low Forward Voltage Drop
- Glass Passivated Junction
- Lead Free Finish/RoHS Compliant(Note 1)("P" Suffix Designates Compliant. See Ordering Information)
- Epoxy Meets UL 94 V-0 Flammability Rating

## Maximum Ratings

- Operating Junction Temperature Range: -55°C to +150°C
- Storage Temperature Range: -55°C to +150°C
- Typical Thermal Resistance: 20°C/W Junction to Ambient
- Typical Thermal Resistance: 5.6°C/W Junction to Lead

| MCC Part Number | Device Marking | Maximum Recurrent Peak Reverse Voltage | Maximum RMS Voltage | Maximum DC Blocking Voltage |
|-----------------|----------------|--|---------------------|-----------------------------|
| HER301G         | HER301G        | 50V                                    | 35V                 | 50V                         |
| HER302G         | HER302G        | 100V                                   | 70V                 | 100V                        |
| HER303G         | HER303G        | 200V                                   | 140V                | 200V                        |
| HER304G         | HER304G        | 300V                                   | 210V                | 300V                        |
| HER305G         | HER305G        | 400V                                   | 280V                | 400V                        |
| HER306G         | HER306G        | 600V                                   | 420V                | 600V                        |
| HER307G         | HER307G        | 800V                                   | 560V                | 800V                        |
| HER308G         | HER308G        | 1000V                                  | 700V                | 1000V                       |

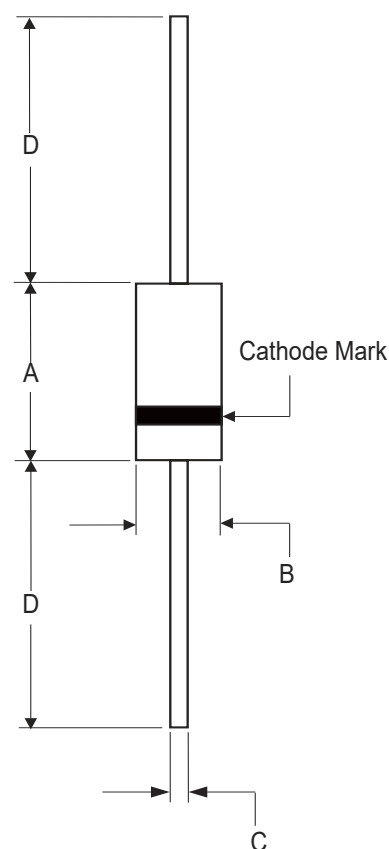
## Electrical Characteristics @ 25°C Unless Otherwise Specified

|  |             |                           |   |
|--|-------------|---------------------------|---|
| Average Forward Current  | $I_{F(AV)}$ | 3.0A                      | $T_A=55^\circ\text{C}$                              |
| Peak Forward Surge Current   | $I_{FSM}$   | 125A                      | 8.3ms, Half Sine                                    |
| Maximum Instantaneous Forward Voltage<br>HER301G-304G<br>HER305G<br>HER306G-308G | $V_F$       | 0.95V<br>1.3V<br>1.7V     | $I_{FM}=3.0A$ ;<br>$T_J=25^\circ\text{C}$           |
| Maximum DC Reverse Current At Rated DC Blocking Voltage                          | $I_R$       | 10 $\mu$ A<br>200 $\mu$ A | $T_J=25^\circ\text{C}$ ;<br>$T_J=100^\circ\text{C}$ |
| Typical Junction Capacitance<br>HER301G-305G<br>HER306G-308G                     | $C_J$       | 80pF<br>50pF              | Measured at 1.0MHz<br>$V_R=4.0V$                    |
| Maximum Reverse Recovery Time<br>HER301G-305G<br>HER306G-308G                    | $t_{rr}$    | 50ns<br>75ns              | $I_F=0.5A$ ; $I_R=1.0A$ ;<br>$I_{rr}=0.25A$         |

Note :1. High Temperature Solder Exemption Applied, See EU Directive Annex 7a.

# 3.0 Amp High Efficient Rectifier 50 to 1000 Volts

## DO-201AD



## DIMENSIONS

| DIM | INCHES |       | MM    |       | NOTE |
|-----|--------|-------|-------|-------|------|
|     | MIN    | MAX   | MIN   | MAX   |      |
| A   | 0.287  | 0.374 | 7.30  | 9.50  |      |
| B   | 0.189  | 0.208 | 4.80  | 5.30  |      |
| C   | 0.048  | 0.052 | 1.20  | 1.30  |      |
| D   | 1.000  | ----- | 25.40 | ----- |      |

## Curve Characteristics

Fig. 1 - Forward Current Derating Curve

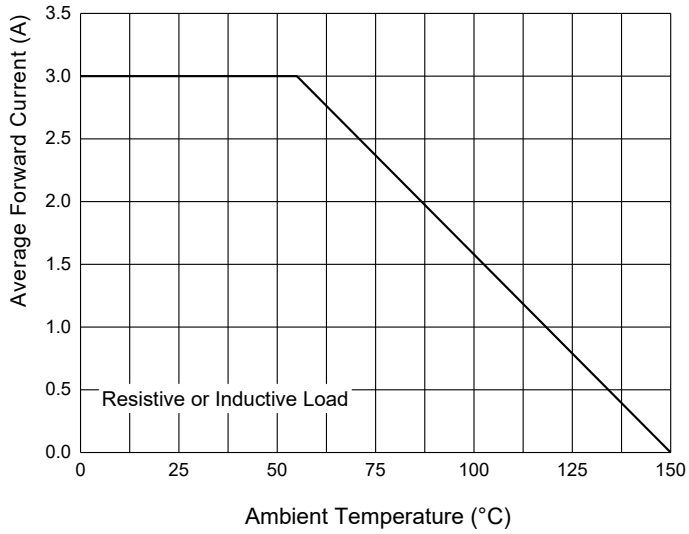


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

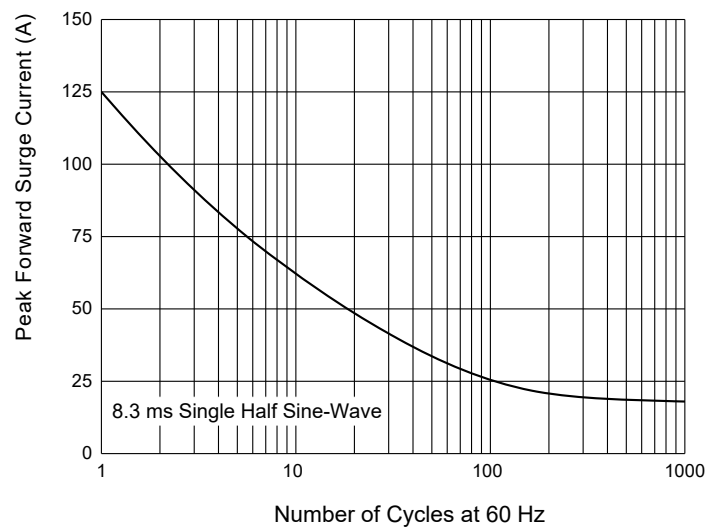


Fig. 3 - Typical Instantaneous Forward Characteristics

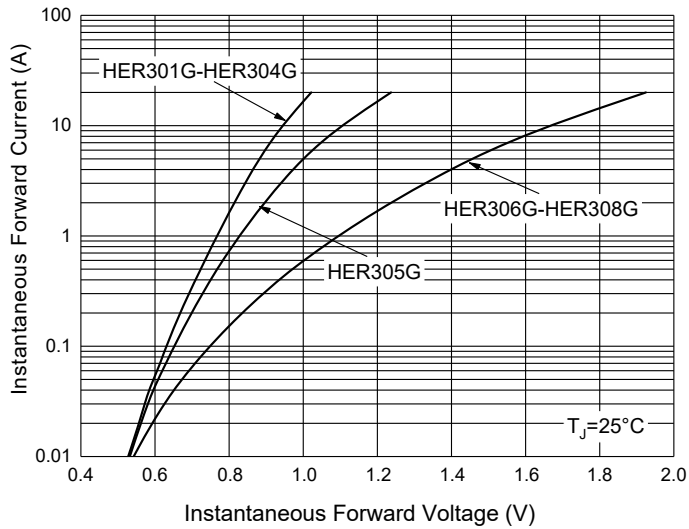
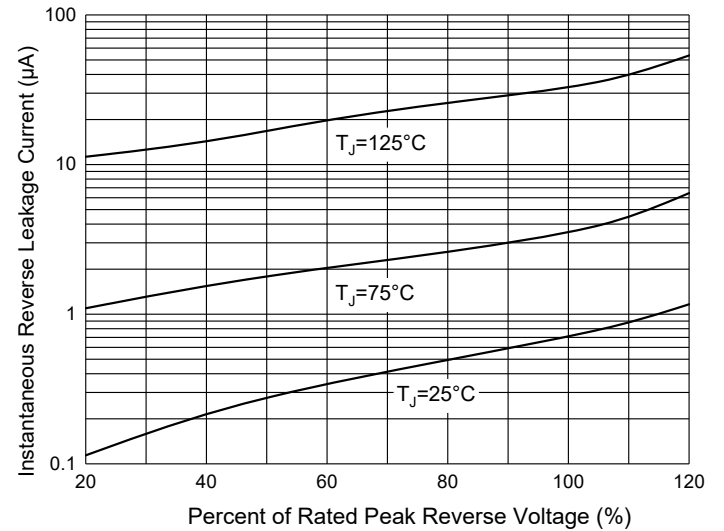


Fig. 4 - Typical Reverse Leakage Characteristics



## Ordering Information

| Device         | Packing                        |
|----------------|--------------------------------|
| Part Number-TP | Tape&Reel: 1.2Kpcs/Reel        |
| Part Number-AP | Ammo Packing: 1.2Kpcs/Ammo Box |
| Part Number-BP | Bulk:500pcs/Box,12Kpcs/Carton  |

Note : Adding "-HF" Suffix For Halogen Free, eg. Part Number-TP-HF

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