

### Features

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

### Maximum Ratings

- Operating Junction Temperature Range: -55°C to +125°C
- Storage Temperature Range: -55°C to +150°C
- Typical Thermal Resistance: 18°C/W Junction to Case
- Typical Thermal Resistance: 60°C/W Junction to Ambient

| MCC Part Number | Device Marking | Maximum Recurrent Peak Reverse Voltage | Maximum RMS Voltage | Maximum DC Blocking Voltage |
|-----------------|----------------|--|---------------------|-----------------------------|
| HER101G         | HER101G        | 50V                                    | 35V                 | 50V                         |
| HER102G         | HER102G        | 100V                                   | 70V                 | 100V                        |
| HER103G         | HER103G        | 200V                                   | 140V                | 200V                        |
| HER104G         | HER104G        | 300V                                   | 210V                | 300V                        |
| HER105G         | HER105G        | 400V                                   | 280V                | 400V                        |
| HER106G         | HER106G        | 600V                                   | 420V                | 600V                        |
| HER107G         | HER107G        | 800V                                   | 560V                | 800V                        |
| HER108G         | HER108G        | 1000V                                  | 700V                | 1000V                       |

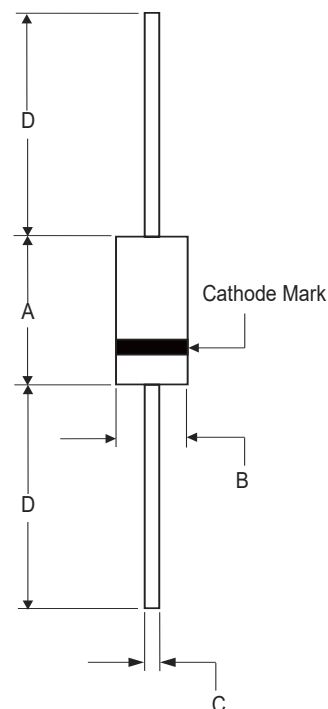
### Electrical Characteristics @ 25°C Unless Otherwise Specified

|   |             |  |  |
|---|-------------|--|--|
| Average Forward Current                                 | $I_{F(AV)}$ | 1.0A                                   | $T_A=55^\circ\text{C}$                                       |
| Peak Forward Surge Current                              | $I_{FSM}$   | 30A                                    | 8.3ms, Half Sine   |
| Maximum Instantaneous Forward Voltage                   | $V_F$       | 1.0V<br>1.3V<br>1.7V                   | $I_{FM}=1.0\text{A};$<br>$T_J=25^\circ\text{C}$              |
| HER101G-104G  |             |  |  |
| HER105G   |             |  |  |
| HER106G-108G  |             |  |  |
| Maximum DC Reverse Current At Rated DC Blocking Voltage | $I_R$       | 5.0 $\mu\text{A}$<br>150 $\mu\text{A}$ | $T_J=25^\circ\text{C};$<br>$T_J=125^\circ\text{C}$           |
| Typical Junction Capacitance                            | $C_J$       | 20pF<br>15pF                           | Measured at 1.0MHz<br>$V_R=4.0\text{V}$                      |
| HER101G-105G  |             |  |  |
| HER106G-108G  |             |  |  |
| Maximum Reverse Recovery Time                           | $t_{rr}$    | 50ns<br>75ns                           | $I_F=0.5\text{A}; I_R=1.0\text{A};$<br>$I_{rr}=0.25\text{A}$ |
| HER101G-105G  |             |  |  |
| HER106G-108G  |             |  |  |

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

# 1.0 Amp High Efficient Rectifier 50 to 1000 Volts

## DO-41



| DIM | INCHES |       | MM    |       | NOTE |
|-----|--------|-------|-------|-------|------|
|     | MIN    | MAX   | MIN   | MAX   |      |
| A   | 0.160  | 0.205 | 4.10  | 5.20  |      |
| B   | 0.080  | 0.107 | 2.00  | 2.70  | Φ    |
| C   | 0.028  | 0.035 | 0.71  | 0.90  | Φ    |
| D   | 1.000  | ----- | 25.40 | ----- |      |

**Curve Characteristics**

Fig. 1 - Forward Current Derating Curve

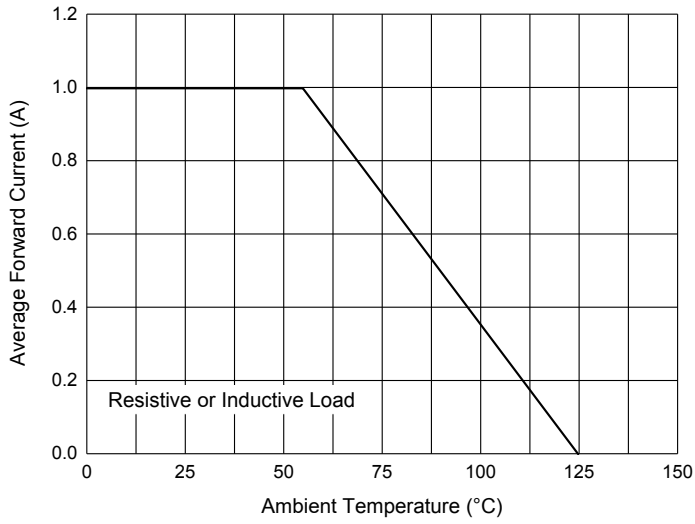


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

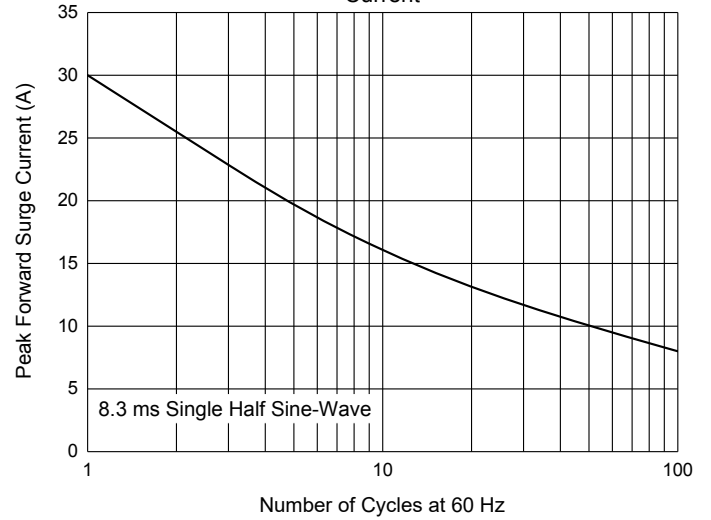


Fig. 3 - Typical Instantaneous Forward Characteristics

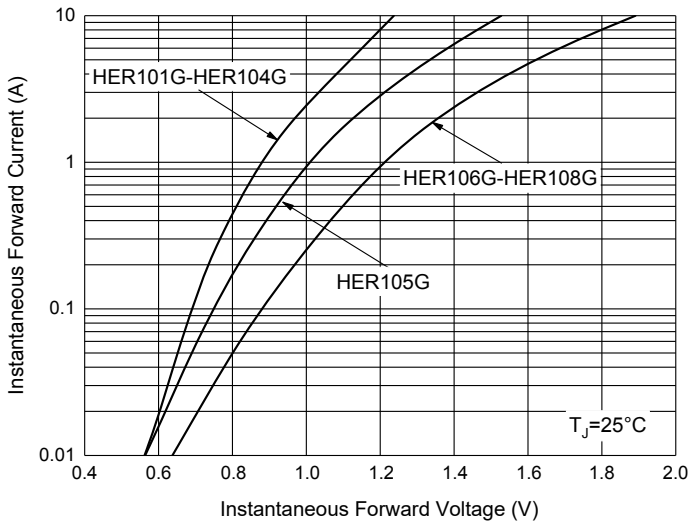
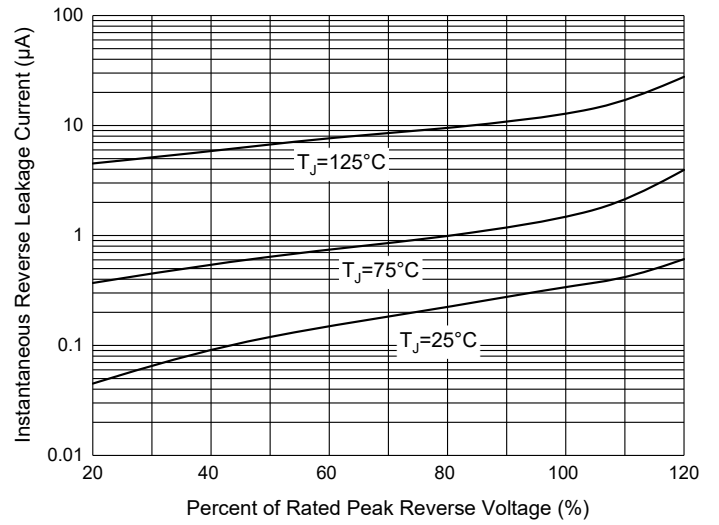


Fig. 4 - Typical Reverse Leakage Characteristics



## Ordering Information

| Device         | Packing                    |
|----------------|----------------------------|
| Part Number-TP | Tape&Reel:5Kpcs/Reel       |
| Part Number-AP | Ammo Packing:5Kpcs/AmmoBox |
| Part Number-BP | Bulk: 50Kpcs/Carton        |

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

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