

**Micro Commercial Components** 

#### 

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## Features

- Halogen free available upon request by adding suffix "-HF"
- Fast Switching Speed
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Lead Free Finish/RoHS Compliant (Note1) ("P"Suffix designates Compliant. See ordering information)

## Maximum Ratings

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

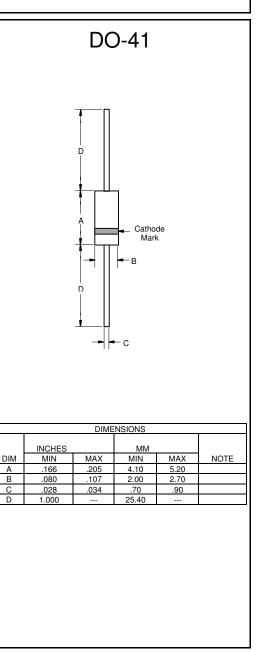
| 18 <sup>o</sup> C/W Junction To Ambient |
|---|
|---|

| MCC Part  | Device            | Maxim              | Maximum    |             | ximum                                      | Maximum                                       |  |
|---|-------------------|--------------------|------------|-------------|--|---|--|
| Number  | Marking           | Recurrent Peak     |            | RMS         |  | DC  |  |
|   | l î               | Reverse            |            | Voltage     |  | Blocking                                      |  |
|   |                   | Voltag             | je         |             |  | Voltage                                       |  |
| HER101G   |                   |                    |            | 35V         |  | 50V   |  |
| HER102G   | HER102G           | 100V               |            | 70V         |  | 100V  |  |
| HER103G   | HER103G           | 200V               |            | •           | 140V                                       | 200V  |  |
| HER104G   | HER104G           | 300V               |            | 210V        |  | 300V  |  |
| HER105G   | HER105G           | 400V               |            | 1           | 280V                                       | 400V  |  |
| HER106G   | HER106C           | 600V               |            | 4           | 420V                                       | 600V  |  |
| HER107G   | HER107G           | i 800\             | /          | Ę           | 560V                                       | 800V  |  |
| HER108G   | HER108C           | i 1000'            | V          |             | 700V                                       | 1000V   |  |
| Electrical Characteristics @25°CUhless Cherwise Specified |                   |                    |            |             |  |   |  |
| Average For   | ward              | I <sub>F(AV)</sub> | 1.0/       | 1.0A        |  | $T_A = 55^{\circ}C$                           |  |
| Current   |                   |                    |            |             |  |   |  |
| Peak Forward Surge  |                   | I <sub>FSM</sub>   | 30A        |             | 8.3ms, half sine                           |   |  |
| Current   |                   |                    |            |             |  |   |  |
| Maximum   |                   |                    |            |             |  |   |  |
| Instantaneous   |                   |                    |            |             |  |   |  |
| Forward Voltage   |                   | VF                 | 1.0        | .,          |  |   |  |
| HER101G-104G  |                   | -                  | 1.0        |             |  | 0.4.  |  |
| HER105G   |                   |                    | 1.3<br>1.7 |             |  | <sub>™</sub> = 1.0A;<br>J = 25 <sup>°</sup> C |  |
| Maximum D   | HER106G-108G      |                    | 1.7        | v           | 1 <sub>J</sub> = 23                        | C   |  |
| Reverse Current At  |                   | I <sub>R</sub>     | 5.0uA      |             | T <sub>.1</sub> = 25                       | °C  |  |
|   | Rated DC Blocking |                    | 150        | ů           |  |   |  |
| Voltage   |                   | 1500               |            | 1. IJ – IZ. |  | 00  |  |
| Maximum R   | everse            |                    |            |             |  |   |  |
| Recovery Time   |                   | <b>-</b>           |            |             |  |   |  |
| HER101G-105G  |                   | Trr                | 50n        | S           | l <sub>⊧</sub> =0.5A, l <sub>в</sub> =1.0A |   |  |
| HER106G-108G  |                   |                    | 75n        | S           | I <sub>RR</sub> =0.2                       |   |  |
| Typical Junction  |                   |                    |            |             |  |   |  |
|   | Capacitance       |                    |            |             |  |   |  |
| HER101G-105G  |                   | CJ                 | 20pF       |             | Measured at                                |   |  |
| HER10   | HER106G-108G      |                    | 15p        | F           | 1.0MH                                      | z, V <sub>R</sub> =4.0V                       |  |

# THRU HER108G

**HER101G** 

## Passivated High Efficient Rectifier 50 to 1000 Volts



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

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## HER101G thru HER108G



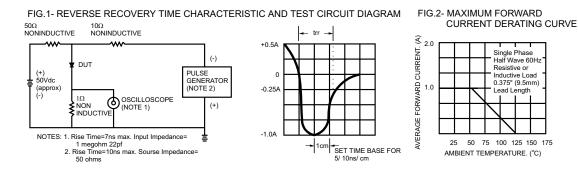


FIG.3- TYPICAL REVERSE CHARACTERISTICS

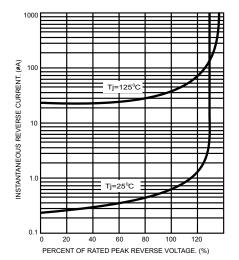


FIG.5- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

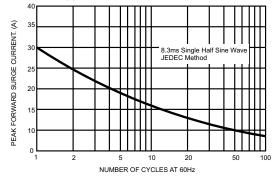


FIG.4- TYPICAL FORWARD CHARACTERISTICS

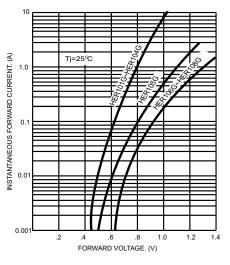
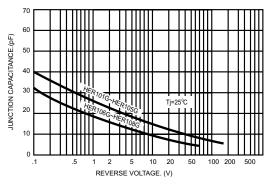


FIG.6- TYPICAL JUNCTION CAPACITANCE



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#### **Ordering Information :**

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

Note : Adding "-HF" suffix for halogen free, eg. Part Number-TP-HF

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