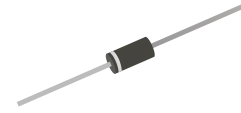


## HER301-G Thru. HER308-G

Voltage: 50 to 1000 V

Current: 3.0 A

RoHS Device

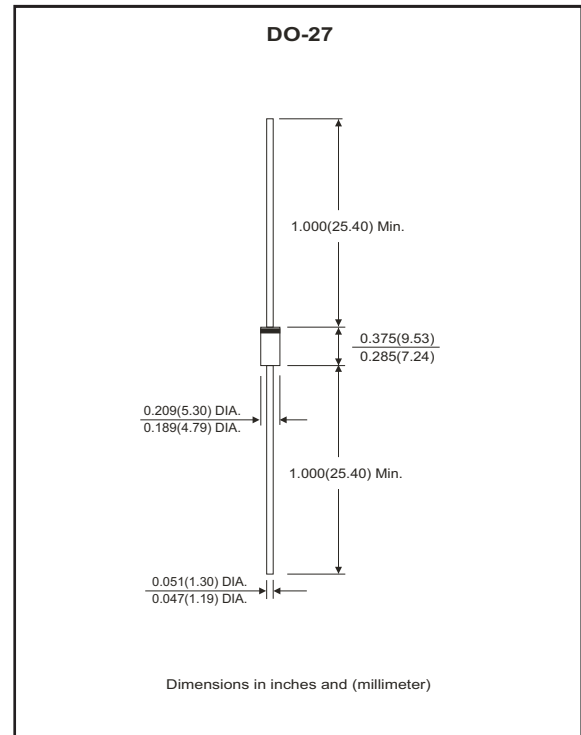


### Features

- Glass passivated chip.
- Low forward voltage.
- High reliability.
- High surge current capability.
- High speed switching.

### Mechanical data

- Case: JEDEC DO-27 molded plastic.
- Epoxy: UL 94V-0 rate flame retardant.
- Polarity: Color band denotes cathode end.
- Lead: Solderable per MIL-STD-202, method 208 guaranteed.
- Mounting position: Any
- Weight: 0.844 grams



### Electrical Characteristics (at T<sub>A</sub>=25°C unless otherwise noted)

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load.

For capacitive load derate current by 20%.

| Parameter                                                          | Symbol            | HER301<br>-G | HER302<br>-G | HER303<br>-G | HER304<br>-G | HER305<br>-G | HER306<br>-G | HER307<br>-G | HER308<br>-G | Unit |
|--------------------------------------------------------------------|-------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|------|
| Maximum repetitive peak reverse voltage<br>@I <sub>T</sub> = 5μA   | V <sub>RRM</sub>  | 50           | 100          | 200          | 300          | 400          | 600          | 800          | 1000         | V    |
| Maximum RMS voltage                                                | V <sub>RMS</sub>  | 35           | 70           | 140          | 210          | 280          | 420          | 560          | 700          | V    |
| Maximum DC blocking voltage                                        | V <sub>DC</sub>   | 50           | 100          | 200          | 300          | 400          | 600          | 800          | 1000         | V    |
| Maximum average forward rectified current<br>@T <sub>A</sub> =25°C | I <sub>(AV)</sub> | 3.0          |              |              |              |              |              |              |              | A    |
| Maximum instantaneous forward<br>voltage at specified current      | V <sub>F</sub>    | 1.0          |              |              |              | 1.3          |              | 1.7          |              | V    |
| Maximum DC reverse current                                         | I <sub>R</sub>    | 5.0          |              |              |              |              |              |              |              | μA   |
| Maximum reverse recovery time (Note 1)                             | t <sub>rr</sub>   | 50           |              |              |              |              | 75           |              |              | ns   |
| Operating temperature range                                        | T <sub>J</sub>    | -55 ~ +150   |              |              |              |              |              |              |              | °C   |
| Storage temperature range                                          | T <sub>STG</sub>  | -55 ~ +150   |              |              |              |              |              |              |              | °C   |

NOTES:

1. Reverse recovery test conditions: I<sub>F</sub>=0.5A, I<sub>R</sub>=1.0A, I<sub>RR</sub>=0.25A(RGI circuit)

## Rating and Characteristic Curves (HER301-G Thru. HER308-G)

Fig.1- Forward Current Derating Curve

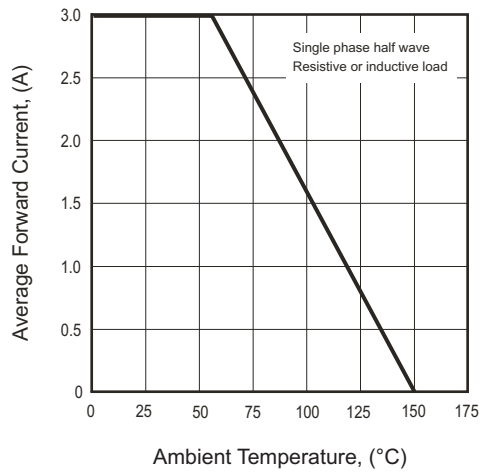


Fig.2- Typical Forward Characteristics

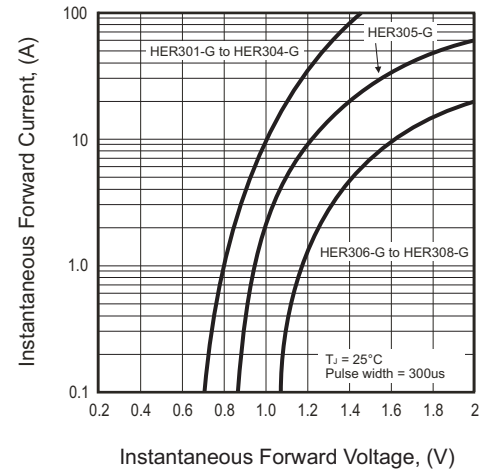


Fig.3- Peak Forward Surge Current

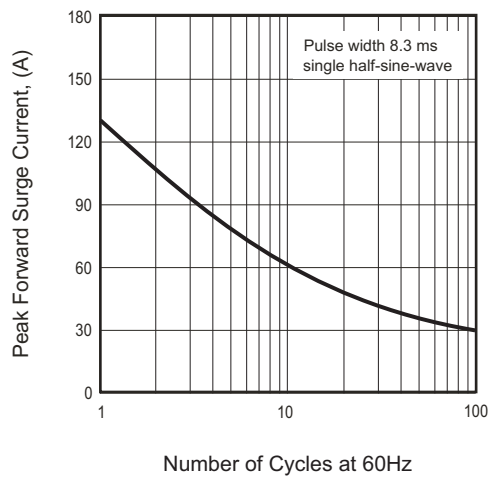
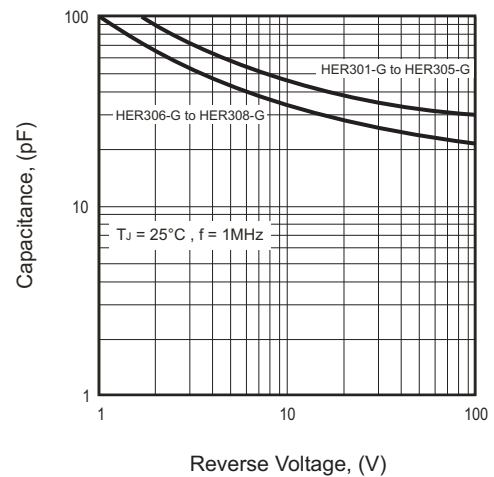
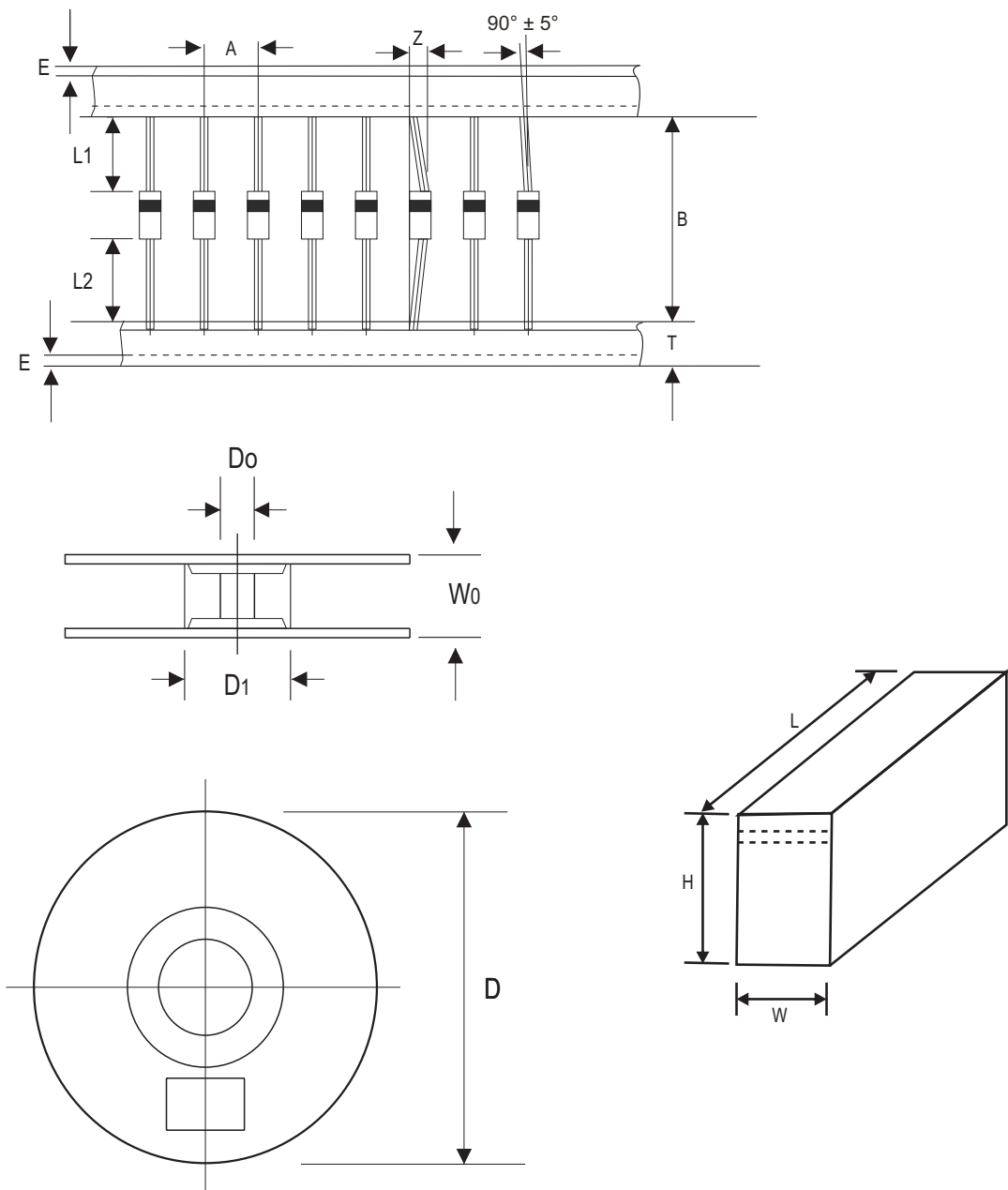


Fig.4- Typical Junction Capacitance



Taping Specification For Axial Lead Diodes



| DO-27 | SYMBOL | A             | B             | Z           | T             | E           | L1-L2       |  |
|-------|--------|---------------|---------------|-------------|---------------|-------------|-------------|--|
|       | (mm)   | 10.0 ± 0.50   | 52.0 ± 0.50   | 1.2 (max)   | 6.0 ± 0.40    | 1.0 (max)   | 1.0 (max)   |  |
|       | (inch) | 0.394 ± 0.020 | 2.047 ± 0.020 | 0.047 (max) | 0.236 ± 0.016 | 0.039 (max) | 0.039 (max) |  |

| DO-27 | SYMBOL | D1            | D0            | D   | W0            | L              | W             | H             |
|-------|--------|---------------|---------------|-----|---------------|----------------|---------------|---------------|
|       | (mm)   | 85.7 ± 0.3    | 16.6 ± 0.4    | 330 | 72.0 ± 0.3    | 260.0 ± 5.0    | 80.0 ± 5.0    | 145.0 ± 5.0   |
|       | (inch) | 3.374 ± 0.012 | 0.654 ± 0.016 | 13  | 2.835 ± 0.012 | 10.236 ± 0.197 | 3.150 ± 0.197 | 5.709 ± 0.197 |

## Marking Code

| Part Number | Marking code | Packaging |
|-------------|--------------|-----------|
| HER301-G    | HER301       | AMMO      |
| HER302-G    | HER302       | AMMO      |
| HER303-G    | HER303       | AMMO      |
| HER304-G    | HER304       | AMMO      |
| HER305-G    | HER305       | AMMO      |
| HER306-G    | HER306       | AMMO      |
| HER307-G    | HER307       | AMMO      |
| HER308-G    | HER308       | AMMO      |
| HER301B-G   | HER301       | BULK      |
| HER302B-G   | HER302       | BULK      |
| HER303B-G   | HER203       | BULK      |
| HER304B-G   | HER204       | BULK      |
| HER305B-G   | HER205       | BULK      |
| HER306B-G   | HER206       | BULK      |
| HER307B-G   | HER207       | BULK      |
| HER308B-G   | HER208       | BULK      |
| HER301T-G   | HER201       | REEL      |
| HER302T-G   | HER202       | REEL      |
| HER303T-G   | HER203       | REEL      |
| HER304T-G   | HER204       | REEL      |
| HER305T-G   | HER205       | REEL      |
| HER306T-G   | HER206       | REEL      |
| HER307T-G   | HER207       | REEL      |
| HER308T-G   | HER208       | REEL      |



**XXX = Product type marking code**

## Standard Package

| Case Type | AMMO PACK |              |             |
|-----------|-----------|--------------|-------------|
|           | BOX (EA)  | Box / Carton | CARTON (EA) |
| DO-27     | 1,200     | 10           | 12,000      |

| Case Type | BULK PACK |              |             |
|-----------|-----------|--------------|-------------|
|           | BOX (EA)  | Box / Carton | CARTON (EA) |
| DO-27     | 200       | 50           | 10,000      |
|           | 500       | 24           | 12,000      |

| Case Type | AMMO REEL |               |             |                  |
|-----------|-----------|---------------|-------------|------------------|
|           | REEL (EA) | Reel / Carton | CARTON (EA) | Reel Size (inch) |
| DO-27     | 1,200     | 4             | 4,800       | 13               |