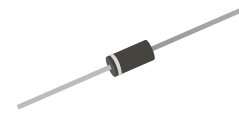


## HER301G-G Thru. HER308G-G

Voltage: 50 to 1000 V

Current: 3.0 A

RoHS Device

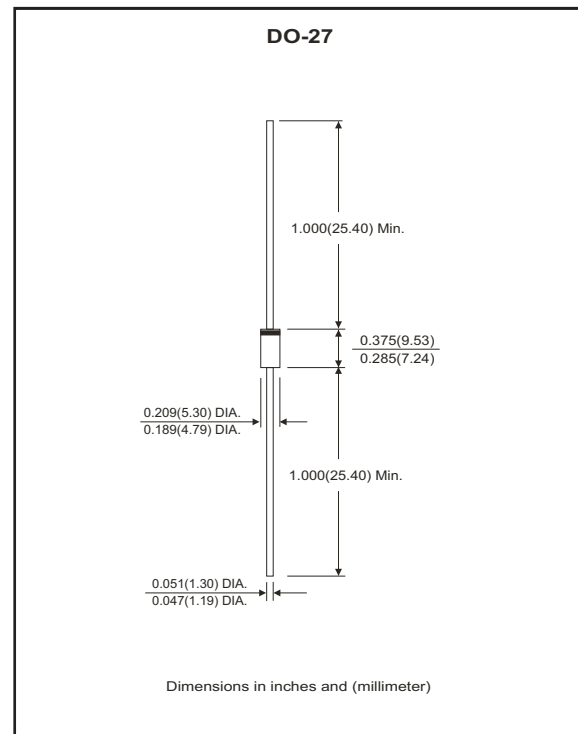


### Features

- 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



### Maximum Ratings and Electrical Characteristics

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            | HER 301G-G | HER 302G-G | HER 303G-G | HER 304G-G | HER 305G-G | HER 306G-G | HER 307G-G | HER 308G-G | Unit |
|-----------------------------------------------------------------|-------------------|------------|------------|------------|------------|------------|------------|------------|------------|------|
| Maximum repetitive peak reverse voltage @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 @T <sub>A</sub> =25°C | I <sub>(AV)</sub> | 3.0        |            |            |            |            |            |            |            | A    |
| Maximum instantaneous forward 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 (HER301G-G Thru. HER308G-G)

Fig.1 - Forward Current Derating Curve

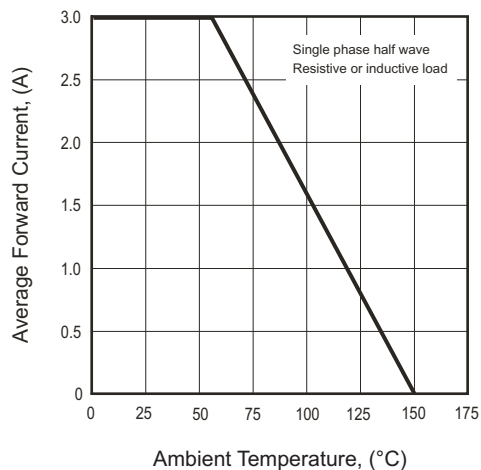


Fig.2 - Typical Forward Characteristics

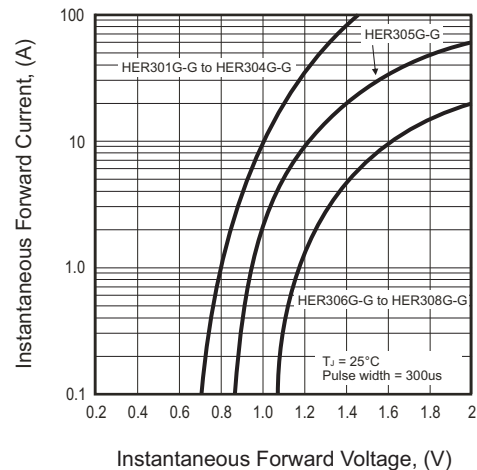


Fig.3 - Peak Forward Surge Current

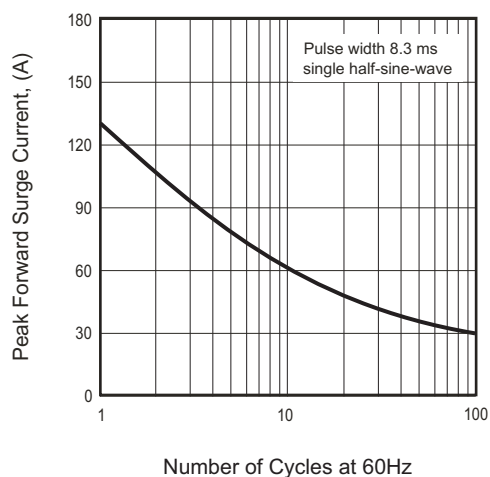
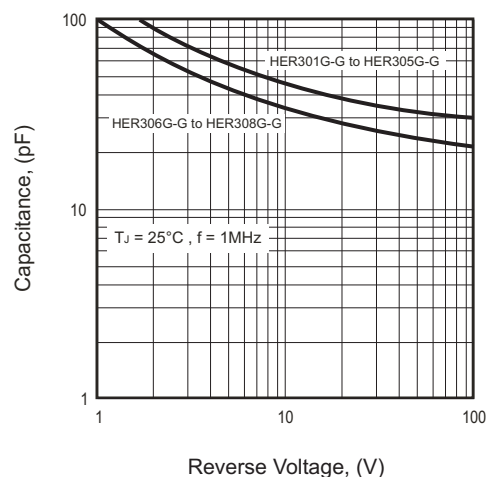
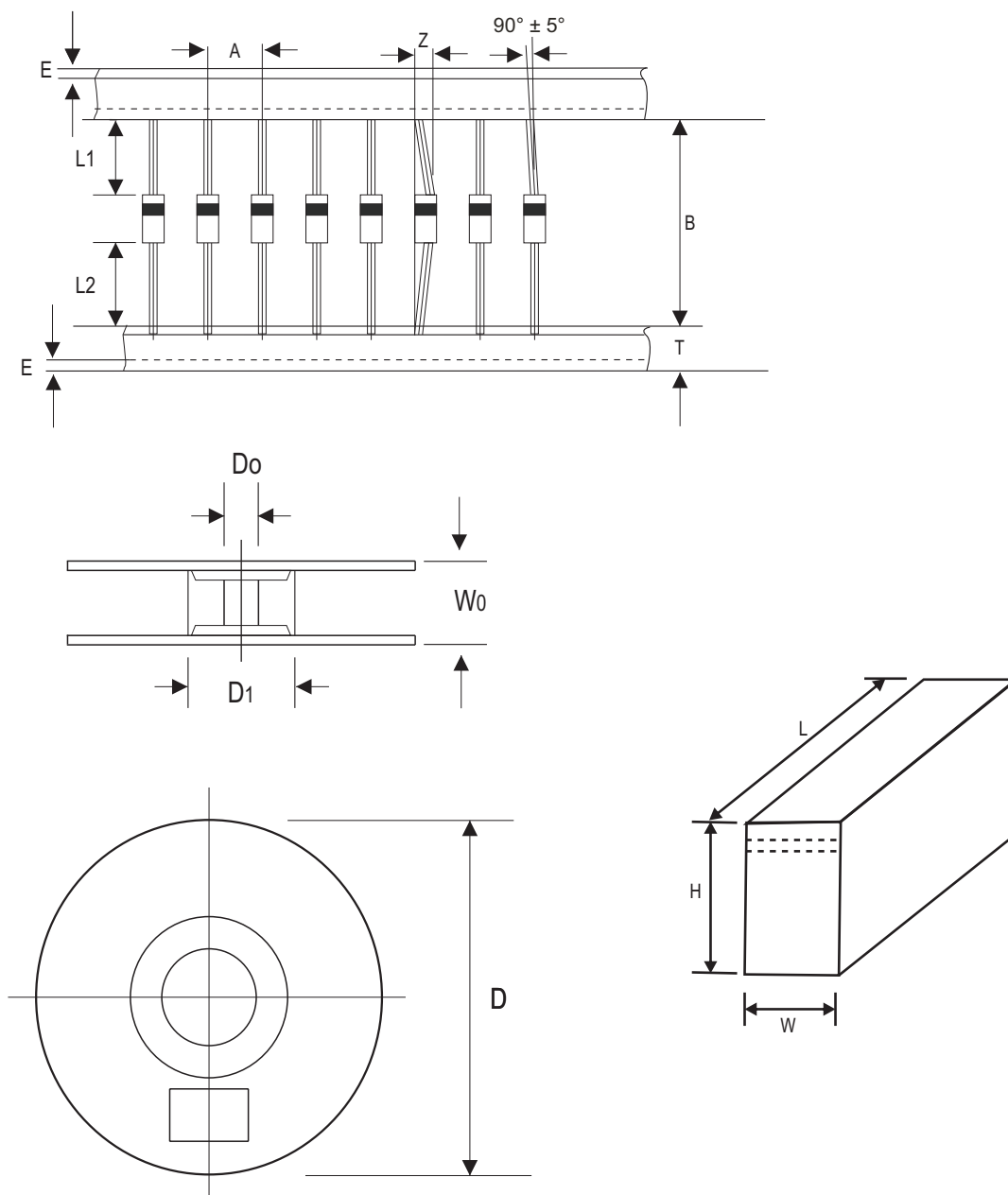


Fig.4 - Typical Junction Capacitance



## Taping Specification For Axial Lead Diodes



| DO-27 | SYMBOL | A             | B             | Z           | T             | E           | L1          | L2          |
|-------|--------|---------------|---------------|-------------|---------------|-------------|-------------|-------------|
|       | (mm)   | 10.00 ± 0.50  | 52.00 ± 0.50  | 1.20 (max)  | 6.00 ± 0.40   | 1.00 (max)  | 1.00 (max)  | 1.00 (max)  |
|       | (inch) | 0.394 ± 0.020 | 2.047 ± 0.020 | 0.047 (max) | 0.236 ± 0.016 | 0.039 (max) | 0.039 (max) | 0.039 (max) |

| DO-27 | SYMBOL | D1            | D0            | D      | W0            | L      | W     | H      |
|-------|--------|---------------|---------------|--------|---------------|--------|-------|--------|
|       | (mm)   | 85.70 ± 0.30  | 16.60 ± 0.40  | 330.00 | 72.00 ± 3.00  | 260.00 | 75.00 | 145.00 |
|       | (inch) | 3.374 ± 0.012 | 0.654 ± 0.016 | 13.000 | 2.835 ± 0.118 | 10.236 | 2.953 | 5.709  |

## Marking Code

| Part Number | Marking code | Packaging |
|-------------|--------------|-----------|
| HER301GA-G  | HER301G      | AMMO      |
| HER302GA-G  | HER302G      | AMMO      |
| HER303GA-G  | HER303G      | AMMO      |
| HER304GA-G  | HER304G      | AMMO      |
| HER305GA-G  | HER305G      | AMMO      |
| HER306GA-G  | HER306G      | AMMO      |
| HER307GA-G  | HER307G      | AMMO      |
| HER308GA-G  | HER308G      | AMMO      |
| HER301GB-G  | HER301G      | BULK      |
| HER302GB-G  | HER302G      | BULK      |
| HER303GB-G  | HER303G      | BULK      |
| HER304GB-G  | HER304G      | BULK      |
| HER305GB-G  | HER305G      | BULK      |
| HER306GB-G  | HER306G      | BULK      |
| HER307GB-G  | HER307G      | BULK      |
| HER308GB-G  | HER308G      | BULK      |
| HER301GT-G  | HER301G      | REEL      |
| HER302GT-G  | HER302G      | REEL      |
| HER303GT-G  | HER303G      | REEL      |
| HER304GT-G  | HER304G      | REEL      |
| HER305GT-G  | HER305G      | REEL      |
| HER306GT-G  | HER306G      | REEL      |
| HER307GT-G  | HER307G      | REEL      |
| HER308GT-G  | HER308G      | REEL      |



**XXX = Product type marking code**

Note:

1) Suffix code after part number to specify packaging item .

| Packaging | Code |
|-----------|------|
| AMMO PACK | A    |
| BULK PACK | B    |
| REEL PACK | T    |

## Standard Packaging

| Case Type | AMMO PACK      |                   |
|-----------|----------------|-------------------|
|           | BOX<br>( pcs ) | CARTON<br>( pcs ) |
| DO-27     | 1,200          | 12,000            |

| Case Type | BULK PACK      |                   |
|-----------|----------------|-------------------|
|           | BOX<br>( pcs ) | CARTON<br>( pcs ) |
| DO-27     | 200            | 10,000            |
|           | 500            | 12,000            |

| Case Type | REEL PACK       |                     |
|-----------|-----------------|---------------------|
|           | REEL<br>( pcs ) | Reel Size<br>(inch) |
| DO-27     | 1,200           | 13                  |