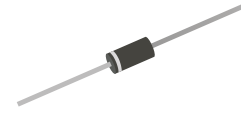


HER301G-G Thru. HER308G-G

Voltage: 50 to 1000 V

Current: 3.0 A

RoHS Device

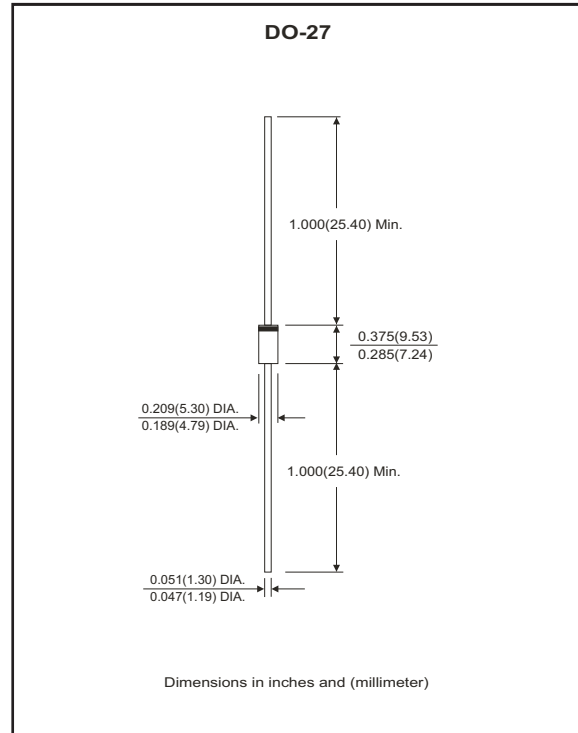


Features

- 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 @ $I_T = 5\mu A$ | V_{RRM} | 50 | 100 | 200 | 300 | 400 | 600 | 800 | 1000 | V |
| Maximum RMS voltage | V_{RMS} | 35 | 70 | 140 | 210 | 280 | 420 | 560 | 700 | V |
| Maximum DC blocking voltage | V_{DC} | 50 | 100 | 200 | 300 | 400 | 600 | 800 | 1000 | V |
| Maximum average forward rectified current @ $T_A = 25^\circ C$ | $I_{(AV)}$ | 3.0 | | | | | | | | A |
| Maximum instantaneous forward voltage at specified current | V_F | 1.0 | | | 1.3 | | 1.7 | | | V |
| Maximum DC reverse current | I_R | 5.0 | | | | | | | | μA |
| Maximum reverse recovery time (Note 1) | t_{rr} | 50 | | | | | 75 | | | ns |
| Operating temperature range | T_J | -55 ~ +150 | | | | | | | | $^\circ C$ |
| Storage temperature range | T_{STG} | -55 ~ +150 | | | | | | | | $^\circ C$ |

NOTES:

1. Reverse recovery test conditions: $I_F = 0.5A$, $I_R = 1.0A$, $I_{RR} = 0.25A$ (RGI circuit)

Rating and Characteristic Curves (HER301G-G Thru. HER308G-G)

Fig.1 - Forward Current Derating Curve

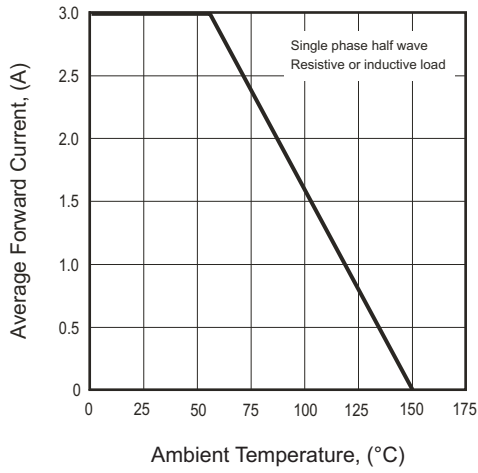


Fig.2 - Typical Forward Characteristics

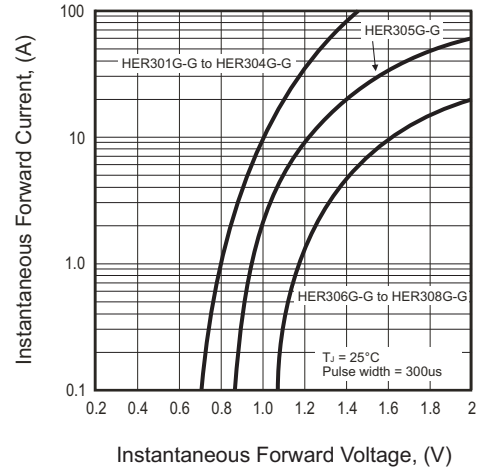


Fig.3 - Peak Forward Surge Current

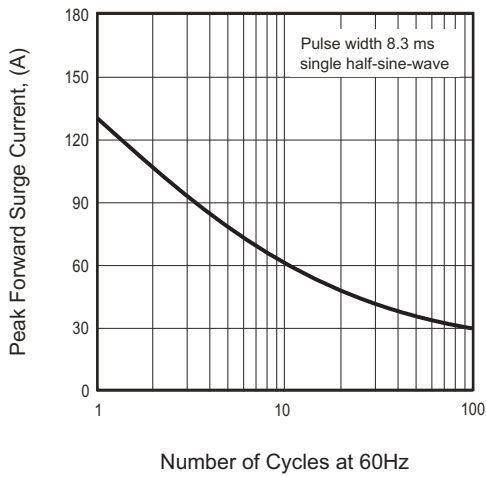
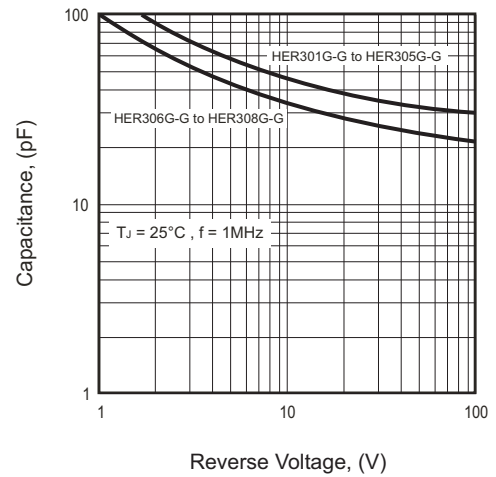
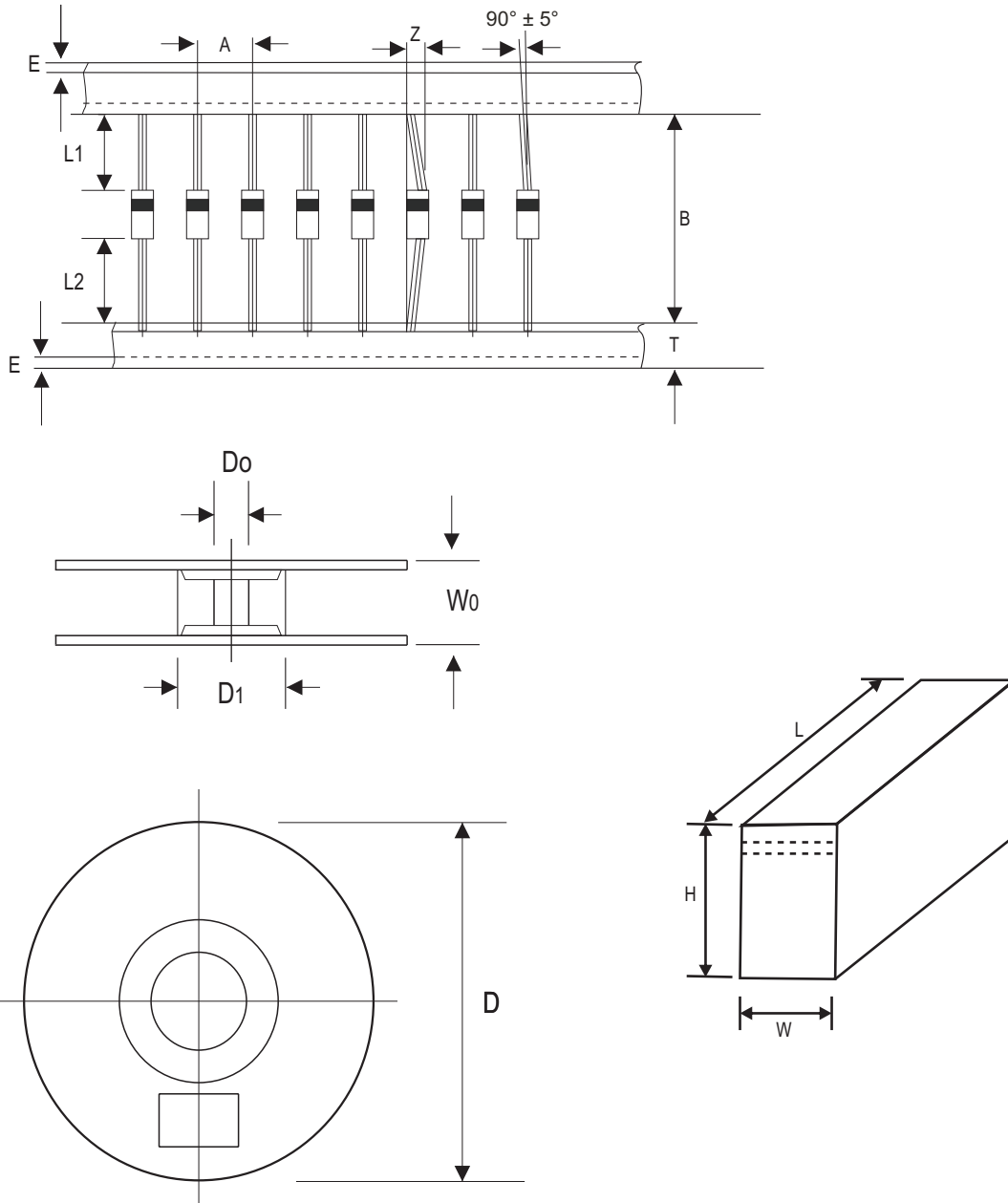


Fig.4 - Typical Junction Capacitance



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 (pcs) | CARTON (pcs) |
| DO-27 | 1,200 | 12,000 |

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

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