

HER301G thru HER308G

1. FEATURES

- * Plastic package has Underwriters Laboratories Flammability Classification 94V-0
- * Ideally suited for use in very high frequency switching power supplies, inverters and as free wheeling diodes
- * Ultrafast recovery time for high efficiency
- * Excellent high temperature switching
- * Soft recovery characteristics
- * Cavity-free glass passivated junction
- * High temperature soldering guaranteed: 260°C/10 seconds, 0.375" (9.5mm) lead length, 5 lbs. (2.3kg) tension

2. Mechanical Data

Case: JEDEC DO-201AD, molded plastic over glass body

Terminals: Plated axial leads, solderable per MIL-STD-750, Method 2026

Polarity: Color band denotes cathode end

Mounting Position: Any

Weight: 0.04 oz., 1.10 g

Handling precaution: None

3. Electrical Characteristic

Maximum Ratings & Thermal Characteristics Ratings at 25°C ambient temperature unless otherwise specified.

| Parameter Symbol | symbol | HER 301G | HER 302G | HER 303G | HER 304G | HER 305G | HER 306G | HER 307G | HER 308G | Unit | |
|--|-----------------|-------------|----------|----------|----------|----------|----------|----------|----------|--------------------|---|
| Maximum repetitive peak reverse voltage | 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 0.375" (9.5mm) lead length at $T_A = 55^\circ\text{C}$ | $I_{F(AV)}$ | 3.0 | | | | | | | | A | |
| Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method) | I_{FSM} | 150 | | | | | 125 | | | | A |
| Maximum full load reverse current, full cycle average, 0.375" (9.5mm) lead lengths at $T_A = 55^\circ\text{C}$ | $I_{R(AV)}$ | 100 | | | | | | | | μA | |
| Typical thermal resistance (Note 2) | $R_{\theta JA}$ | 55 | | | | | | | | $^\circ\text{C/W}$ | |
| Operating junction and storage temperature range | T_J, T_{STG} | -50 to +150 | | | | | | | | $^\circ\text{C}$ | |

Electrical Characteristics Ratings at 25°C ambient temperature unless otherwise specified.

| Parameter Symbol | symbol | HER 301G | HER 302G | HER 303G | HER 304G | HER 305G | HER 306G | HER 307G | HER 308G | Unit | |
|--|----------|----------|----------|----------|----------|----------|----------|----------|----------|------|---------------|
| Maximum instantaneous forward voltage at 3.0A | V_F | 1.00 | | | 1.30 | | 1.85 | | | V | |
| Maximum DC reverse current $T_A = 25^\circ\text{C}$ at rated DC blocking voltage $T_A = 125^\circ\text{C}$ | I_R | 10 | | | | | 200 | | | | μA |
| Typical reverse recovery time (Note 1) | t_{rr} | 50 | | | | | 75 | | | | ns |
| Typical junction capacitance at 4.0V, 1MHz | C_J | 50 | | | | | 40 | | | | PF |

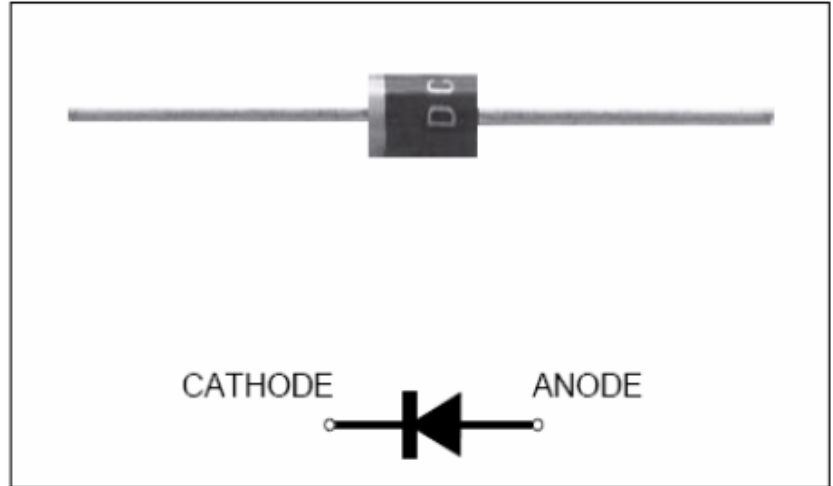
NOTES:

1. $I_F = 0.5\text{A}$, $I_R = 1.0\text{A}$, $I_{RR} = 0.25\text{A}$
2. Thermal resistance from junction to ambient at 0.375" (9.5mm) lead length, P.C.B. mounted

Glass Passivated Junction High Efficiency Rectifiers

Reverse Voltage 50 to 1000V

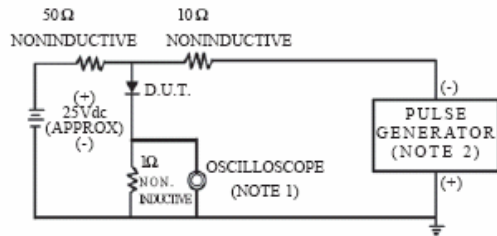
Forward Current 3.0A



We declare that the material of product compliance with RoHS requirements.

4. Ratings and Characteristic Curves (TA = 25°C unless otherwise noted)

FIG. 1-TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTIC



NOTES: 1. Rise Time=7ns max.
Input Impedance=1megohm, 22pF.
2. Rise Time=10ns max.
Source Impedance=50 ohms.

FIG. 2 - TYPICAL FORWARD CURRENT DERATING CURVE

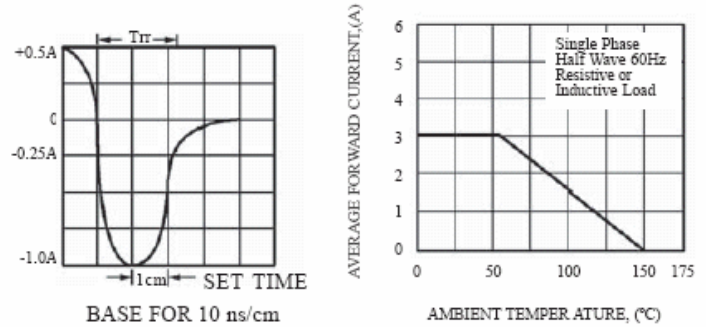


FIG. 3 - TYPICAL REVERSE CHARACTERISTICS

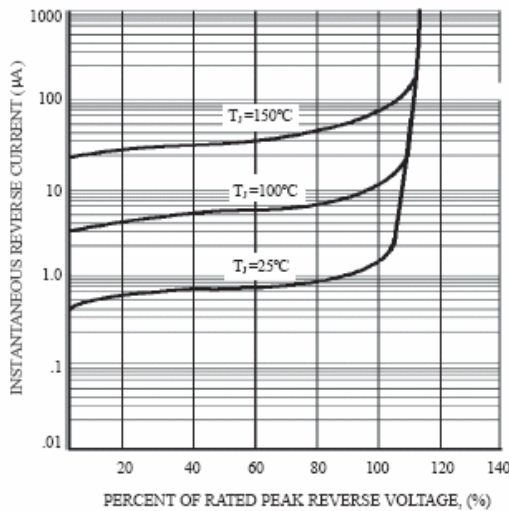


FIG. 4 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

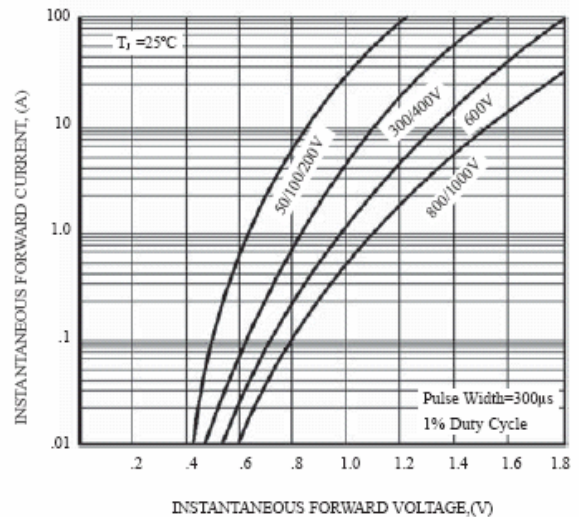


FIG. 5 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

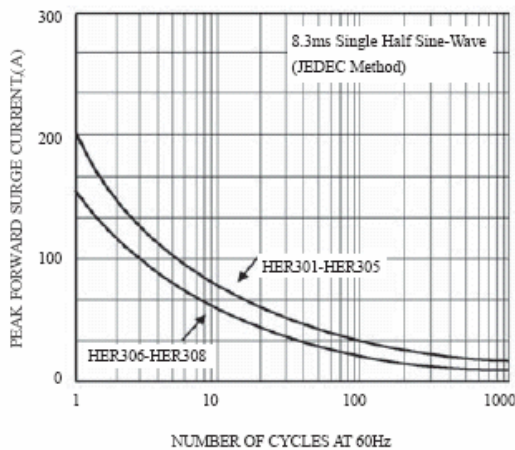
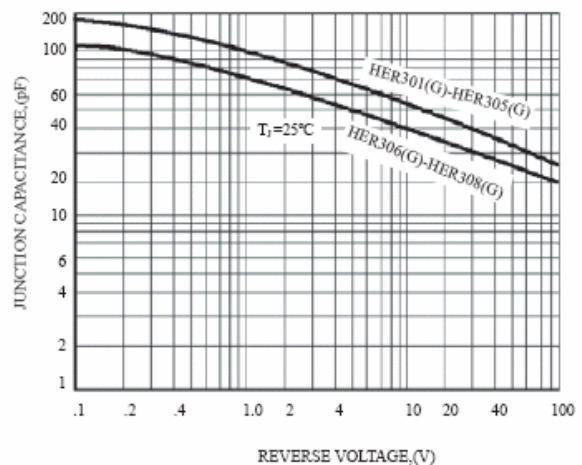
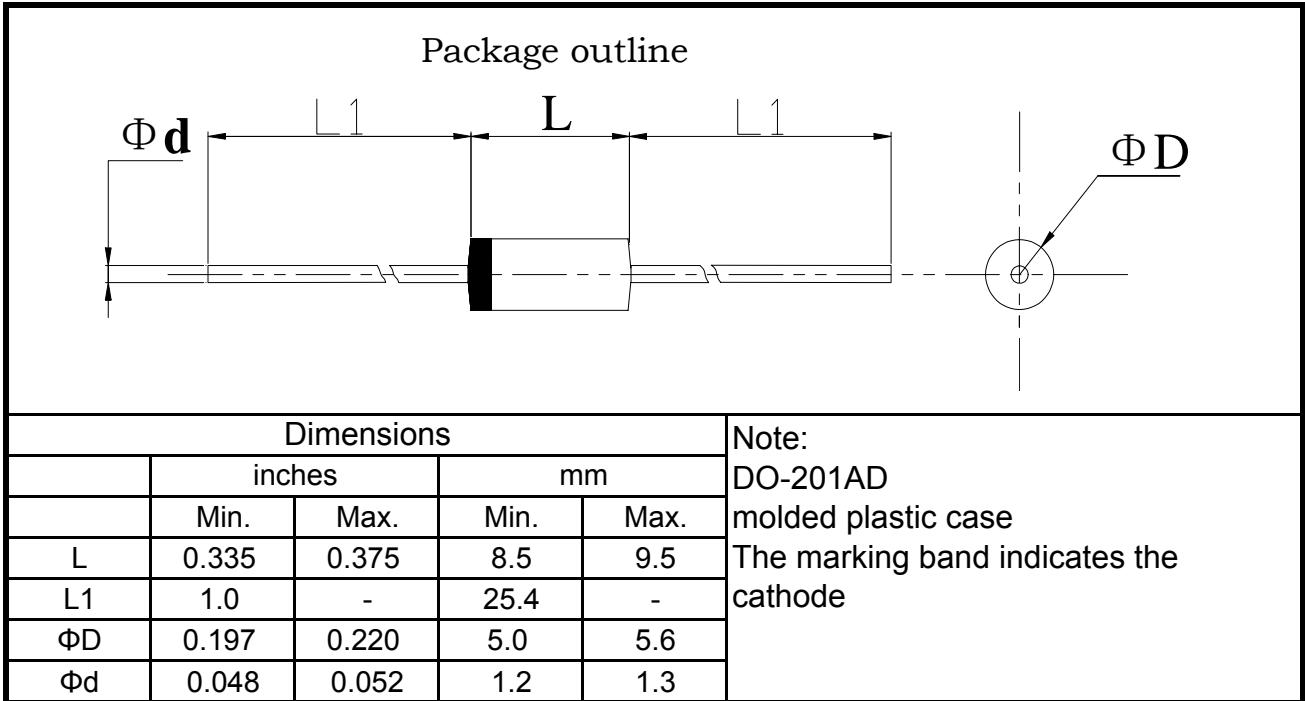


FIG. 6 - TYPICAL JUNCTION CAPACITANCE



5.Package Dimensions in inches and (millimeters)



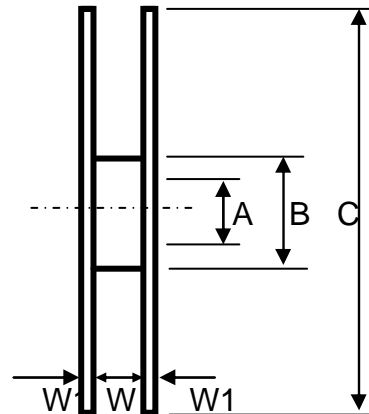
Packing Of Plastic-Sealed Axial Lead Diodes

1. 卷盘/Reel Packing (52mm)

A: 卷盘规格/Reel spec.



Unit:mm



| Item | Symbol | Dimension |
|-----------|--------|-----------|
| Dimeter | A | 76.4±0.1 |
| | B | 82.5±0.2 |
| | C | 330±0.5 |
| Width | W | 72±0.2 |
| Thickness | W1 | 3±0.2 |

B: 外箱规格/Outer Box Specification



| Item | Symbol | Dimension |
|------|--------|-----------|
| Size | L | 350±2 |
| | W | 350±2 |
| | H | 340±4 |

按以上包装方式: (As per the above spec)

| | 外型/Outside | | |
|-------------------|---------------|-------|----------|
| | DO-41 & A-405 | DO-15 | DO-201AD |
| Q'ty/Taping | 5K | 4K | 1.4K |
| Q'ty/Packing Case | 20K | 16K | 5.6K |

2. 弹带盒装/Ammo Packing

Unit:mm

A: 弹带盒规格/Ammo Box Spec.



| Item | Symbol | Dimension | Notes |
|------------|--------|-----------|-----------|
| Box's Size | L | 260±2 | 52mm TYPE |
| | W | 76±2 | |
| | H | 100±4 | |
| | L | 250±3 | 26mm TYPE |
| | W | 45±3 | |
| | H | 95±5 | |

B: 外箱规格/Outer Box Specification



| Item | Symbol | Dimension | Notes |
|-------------|--------|-----------|-----------|
| Case's Size | L | 430±2 | 52mm TYPE |
| | W | 280±2 | |
| | H | 225±4 | |
| | L | 435±3 | 26mm TYPE |
| | W | 280±3 | |
| | H | 295±5 | |

按以上包装方式: (As per the above spec)

| | 外型/Outside | | |
|--------------------------------|---------------------|-------|----------|
| | A-405 & DO-41 & R-1 | DO-15 | DO-201AD |
| Q'ty/Taping | 3K | 2K | 0.8K |
| Q'ty/Packing Case 26mm/TYPE | 30K | 20K | 7.2K |
| Q'ty/Packing Case 52mm/TYPE | 60K | 40K | 14.4K |

3. 散装/Bulk Packing

A. 包装盒尺寸/Box Dimension



(DO-41&DO-15)

| Item | Symbol | Dimension |
|------------|--------|-----------|
| Box's Size | L | 200±2 |
| | W | 84±2 |
| | H | 21±2 |



(DO-201AD)

| Item | Symbol | Dimension |
|------------|--------|-----------|
| Box's Size | L | 200±2 |
| | W | 84±2 |
| | H | 29±2 |

B: 外箱规格/Outer Box Specification



| Item | Symbol | Dimension |
|-------------|--------|-----------|
| Case's Size | L | 465±2 |
| | W | 225±2 |
| | H | 260±4 |

按以上包装方式: (As per the above spec)

| | 外型/Outside | | |
|-------------------|-----------------|-------|----------|
| | DO-41&A-405&R-1 | DO-15 | DO-201AD |
| Q'ty/Taping | 1K | 0.5K | 0.3K |
| Q'ty/Packing Case | 50K | 25K | 12K |

4. 编带图形及规格/Taping Specification



Unit:mm

| 尺寸代号 | 编带尺寸/Tape Dimension | | |
|----------------|---------------------|--------------|--------------|
| Dimension Code | 26/tape | 52/tape | 52/tape# |
| W | 26 0.0/+1.6 | 52 -1.0/+2.0 | 52 -1.0/+2.0 |
| P | 5±0.5 | 5±0.5 | 10±0.5 |
| L1-L2 | <1.0 | <1.2 | <1.2 |
| H | 6±1.0 | 6±1.0 | 6±1.0 |
| Z | <1.2 | <1.2 | <1.2 |
| R | <1.0 | <1.0 | <1.0 |
| T | >3.2 | >3.2 | >3.2 |

注: 52编带# 为DO-201AD编带规格

Remark: 52 tape# is DO-201AD taping spec.

单击下面可查看定价，库存，交付和生命周期等信息

[>>LRC\(乐山无线电\)](#)