

### Features

- ✧ High efficiency, Low VF
- ✧ High current capability
- ✧ High reliability
- ✧ High surge current capability
- ✧ For use in low voltage, high frequency inverter, free wheeling, and polarity protection application
- ✧ Green compound with suffix "G" on packing code & prefix "G" on datecode



### Mechanical Data

- ✧ Case: Molded plastic
- ✧ Epoxy: UL 94V-0 rate flame retardant
- ✧ Lead: Pure tin plated, lead free, solderable per MIL-STD-202, Method 208 guaranteed
- ✧ Polarity: Color band denotes cathode
- ✧ Solder dip 260°C max.10s per JESD 22-B106
- ✧ Weight: 0.40 grams

### Ordering Information (example)

Part No.	Package	Packing	INNER TAPE	Packing code	Packing code (Green)
HER201	DO-15	1.5K / AMMO box	52mm	A0	A0G

### Maximum Ratings and Electrical Characteristics

Rating at 25 °C ambient temperature unless otherwise specified.

Parameter	Symbol	HER 201	HER 202	HER 203	HER 204	HER 205	HER 206	HER 207	Unit
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	50	100	200	300	400	600	800	V
Maximum RMS Voltage	$V_{RMS}$	35	70	140	210	280	420	560	V
Maximum DC Blocking Voltage	$V_{DC}$	50	100	200	300	400	600	800	V
Maximum Average Forward Rectified Current	$I_{F(AV)}$	2							A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	$I_{FSM}$	60							A
Maximum Instantaneous Forward Voltage (Note 1) @ 2 A	$V_F$	1.0			1.3		1.7		V
Maximum Reverse Current @ Rated VR $T_A=25\text{ }^\circ\text{C}$ $T_A=125\text{ }^\circ\text{C}$	$I_R$	5 150							$\mu\text{A}$
Maximum Reverse Recovery Time (Note 2)	$T_{rr}$	50					75		nS
Typical Junction Capacitance (Note 3)	$C_j$	50					35		pF
Typical Thermal Resistance	$R_{\theta JA}$ $R_{\theta JC}$	60 8							$^\circ\text{C/W}$
Operating Temperature Range	$T_J$	- 55 to + 150							$^\circ\text{C}$
Storage Temperature Range	$T_{STG}$	- 55 to + 150							$^\circ\text{C}$

Note 1: Pulse Test with PW=300 usec, 1% Duty Cycle

Note 2: Reverse Recovery Test Conditions: IF=0.5A, IR=1.0A, IRR=0.25A

Note 3: Measured at 1 MHz and Applied Reverse Voltage of 4.0V D.C.

RATINGS AND CHARACTERISTIC CURVES (HER201 THRU HER207)

FIG.1 MAXIMUM FORWARD CURRENT DERATING CURVE

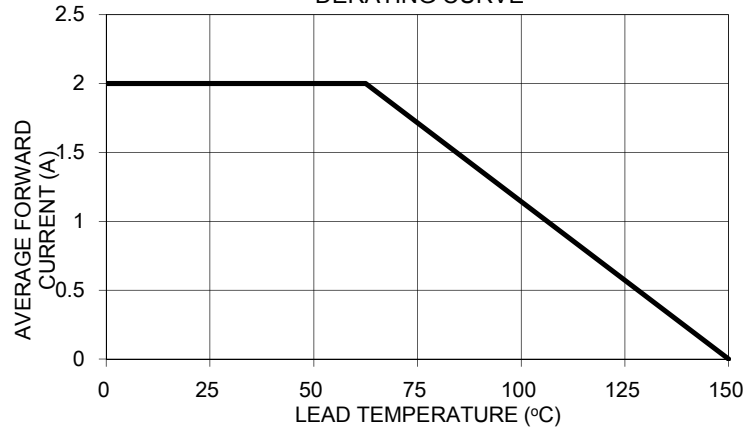


FIG. 2 TYPICAL REVERSE CHARACTERISTICS

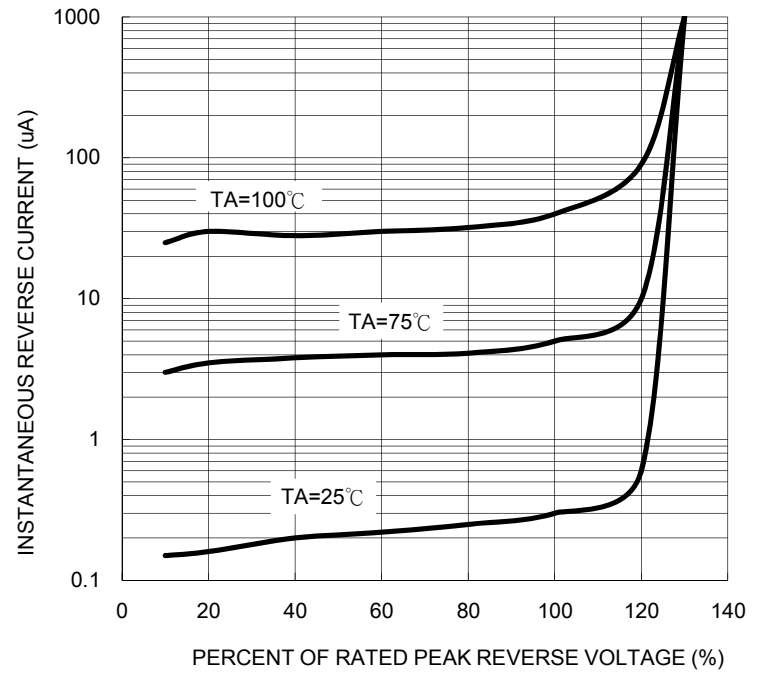


FIG. 3 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

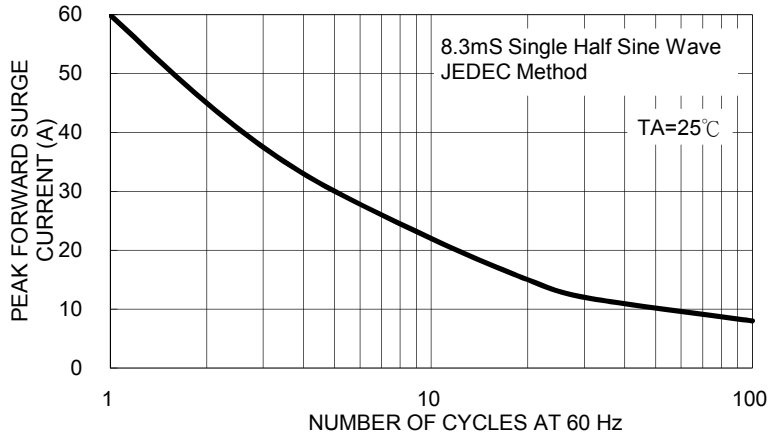


FIG. 5 TYPICAL FORWARD CHARACTERISTICS

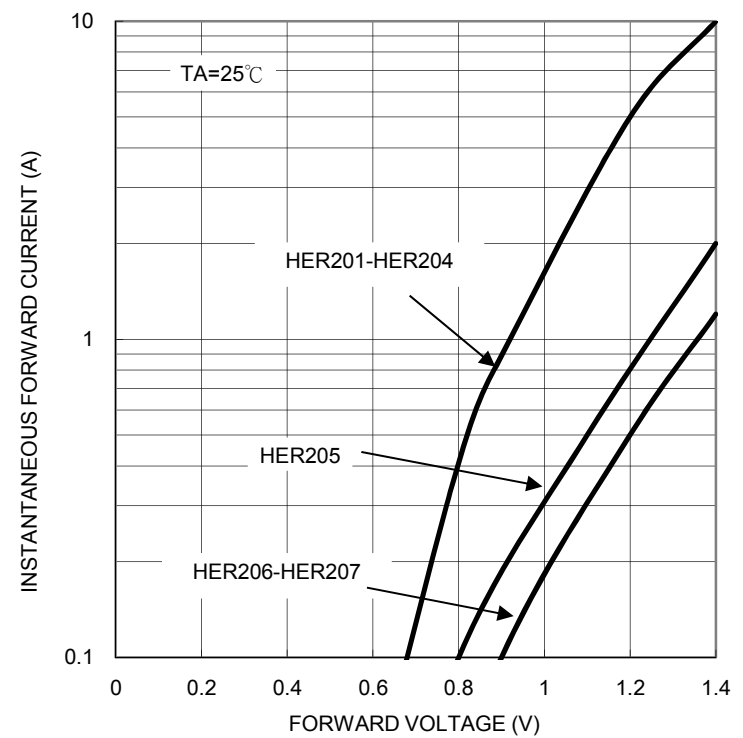


FIG. 4 TYPICAL JUNCTION CAPACITANCE

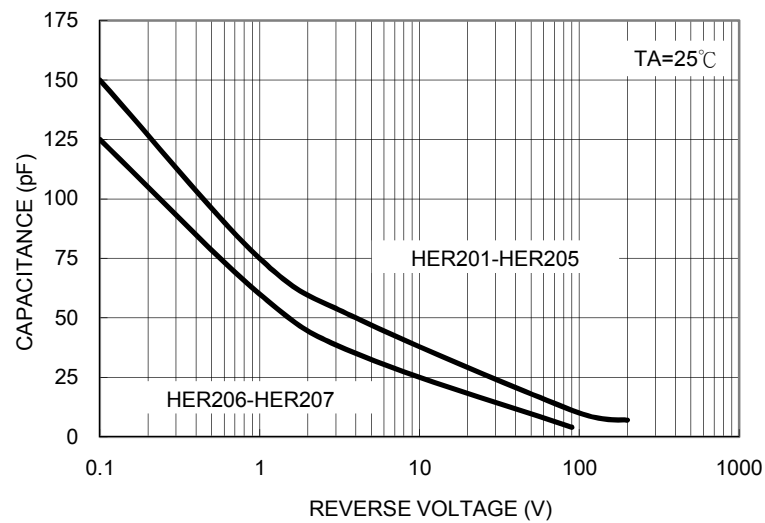
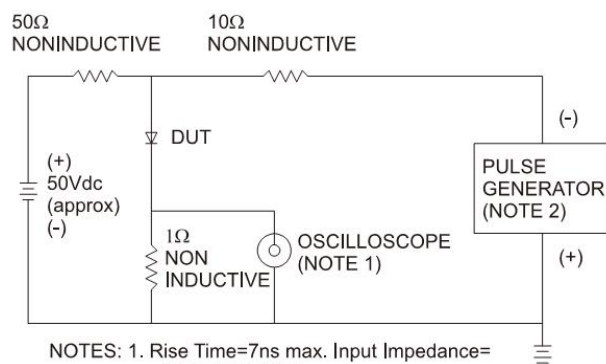
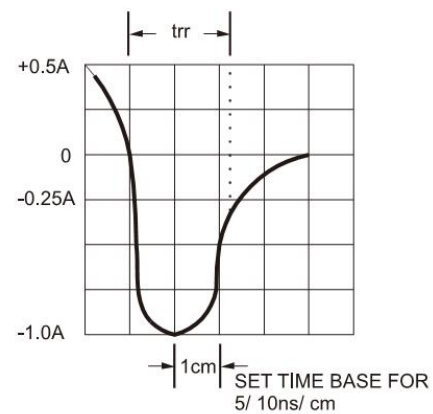


FIG.6- REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM



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

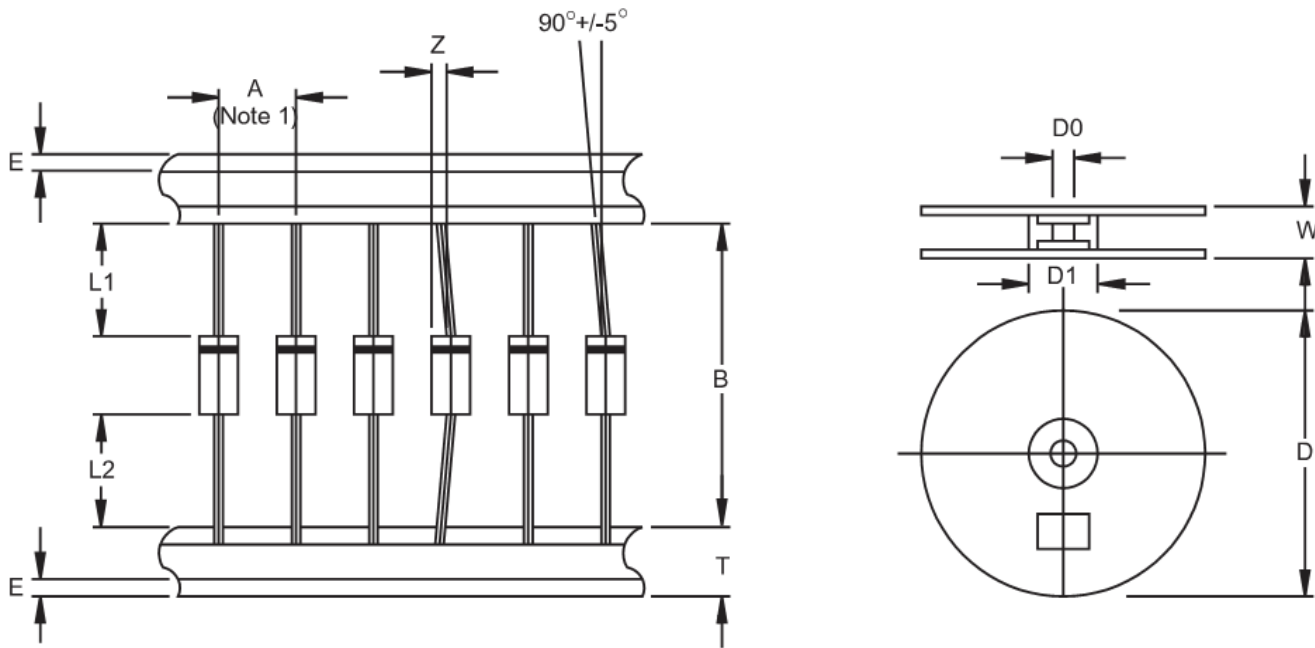


**Ordering information**

Part No.	Package	Packing	INNER TAPE	Packing code	Packing code (Green)
HER20x (Note)	DO-15	1.5K / AMMO box	52mm	A0	A0G
	DO-15	3.5K / 13" Reel	52mm	R0	R0G
	DO-15	1K / Bulk packing		B0	B0G

Note: "x" is Device Code from "1" thru "7".

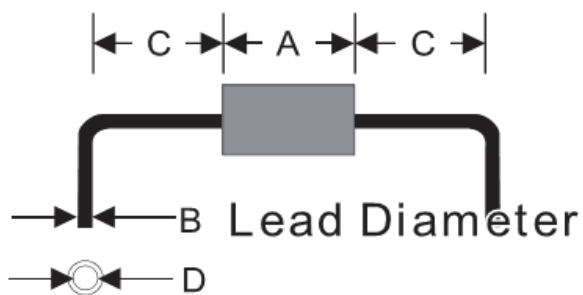
**AXIAL LEAD TAPING SPECIFICATIONS**



Outline	A	B	Z	T	E	L1-L2	D	D1	D0	W
		±0.5	±1.5	MAX	±0.4	MAX	MAX		±0.3	±0.4
DO-15	5	52.4	1.2	6	0.8	1	330	85.7	16.6	76

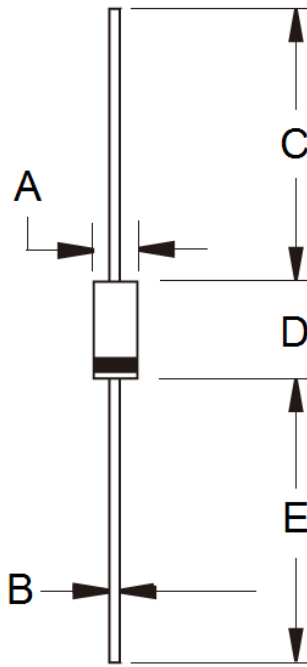
Unit (mm)

**Suggested Mounting Hole Rule**



Symbol	Unit(mm)
A	6.4
B	0.8
C	3.0
D	1.2

**Dimensions**



DIM.	Unit(mm)		Unit(inch)	
	Min	Max	Min	Max
A	2.60	3.60	0.102	0.142
B	0.70	0.90	0.028	0.035
C	25.40	-	1.000	-
D	5.80	7.60	0.228	0.299
E	25.40	-	1.000	-

**Marking Diagram**



- P/N = Specific Device Code
- G = Green Compound
- YWW = Date Code
- F = Factory Code