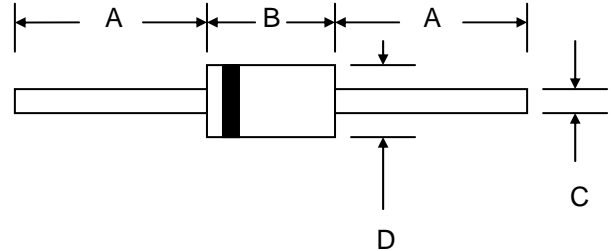


Features

- Diffused Junction
- Low Forward Voltage Drop
- High Surge Current Capability
- High Reliability
- Ideally Suited for Use in High Frequency SMPS, Inverters and As Free Wheeling Diodes



Mechanical Data

- Case: DO-201AD, Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band
- Weight: 1.2 grams (approx.)
- Mounting Position: Any
- Marking: Type Number
- **Lead Free: For RoHS / Lead Free Version, Add “-LF” Suffix to Part Number, See Page 4**

DO-201AD		
Dim	Min	Max
A	25.4	—
B	7.20	9.50
C	1.20	1.30
D	4.80	5.30
All Dimensions in mm		

Maximum Ratings and Electrical Characteristics @T_A=25°C unless otherwise specified

Single Phase, half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

Characteristic	Symbol	HER 301	HER 302	HER 303	HER 304	HER 305	HER 306	HER 307	HER 308	Unit
Peak Repetitive Reverse Voltage	V _{RRM}	50	100	200	300	400	600	800	1000	V
Working Peak Reverse Voltage	V _{RWM}									
DC Blocking Voltage	V _R									
RMS Reverse Voltage	V _{R(RMS)}	35	70	140	210	280	420	560	700	V
Average Rectified Output Current (Note 1) @T _A = 55°C	I _O	3.0								A
Non-Repetitive Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method)	I _{FSM}	150								A
Forward Voltage @I _F = 3.0A	V _{FM}	1.0			1.3		1.7			V
Peak Reverse Current @T _A = 25°C At Rated DC Blocking Voltage @T _A = 100°C	I _{RM}	10 100								μA
Reverse Recovery Time (Note 2)	t _{rr}	50				75				nS
Typical Junction Capacitance (Note 3)	C _J	45				36				pF
Typical Thermal Resistance Junction to Ambient (Note 1)	R _{JA}	20								°C/W
Typical Thermal Resistance Junction to Lead (Note 1)	R _{JL}	8.5								
Operating Temperature Range	T _J	-65 to +125								°C
Storage Temperature Range	T _{STG}	-65 to +150								°C

Note: 1. Leads maintained at ambient temperature at a distance of 9.5mm from the case.
2. Measured with I_F = 0.5A, I_R = 1.0A, I_{RR} = 0.25A.
3. Measured at 1.0 MHz and Applied Reverse Voltage of 4.0V D.C.

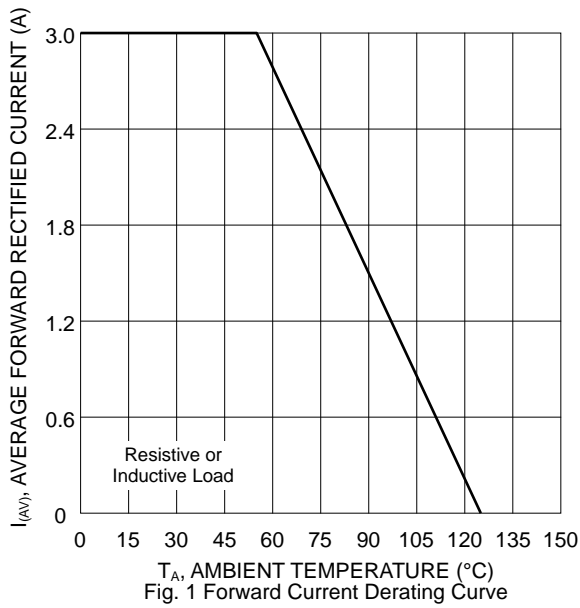


Fig. 1 Forward Current Derating Curve

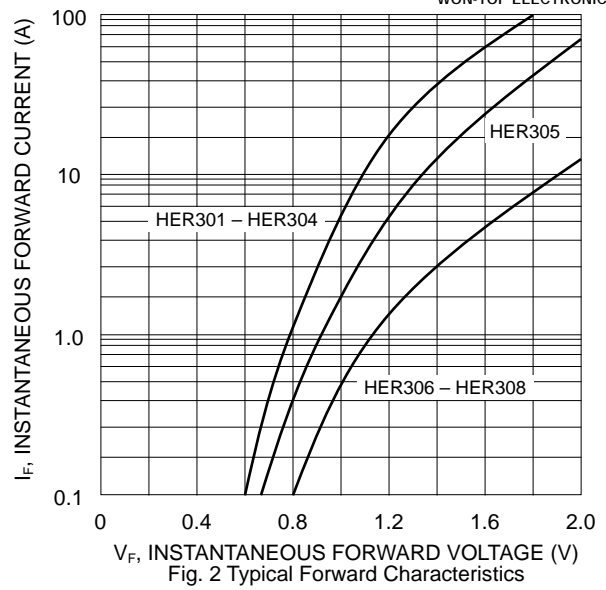


Fig. 2 Typical Forward Characteristics

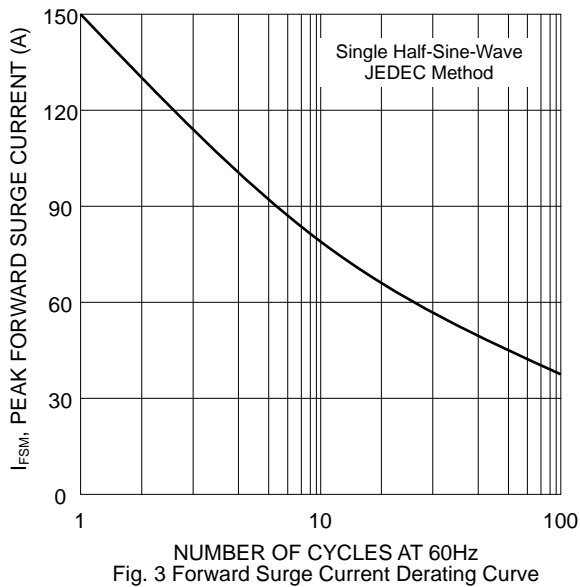


Fig. 3 Forward Surge Current Derating Curve

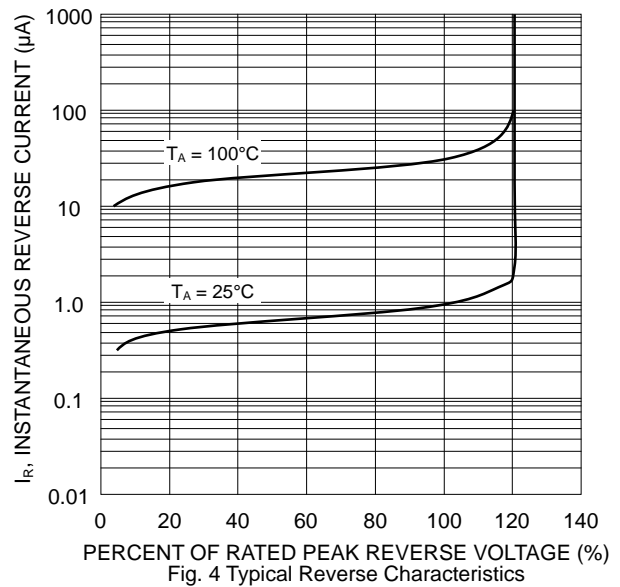


Fig. 4 Typical Reverse Characteristics

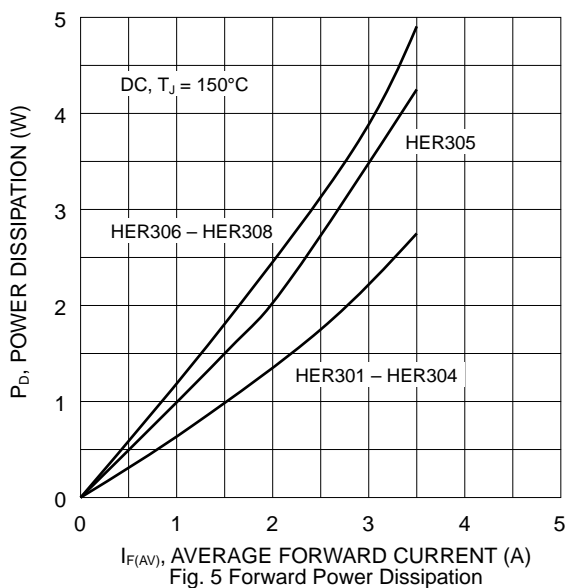


Fig. 5 Forward Power Dissipation

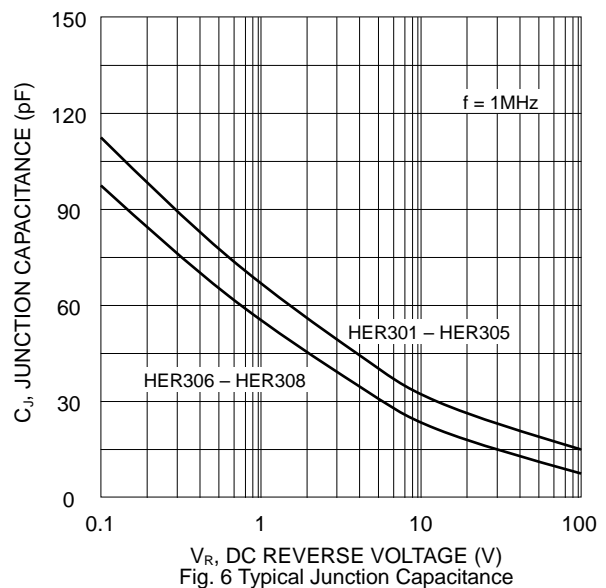
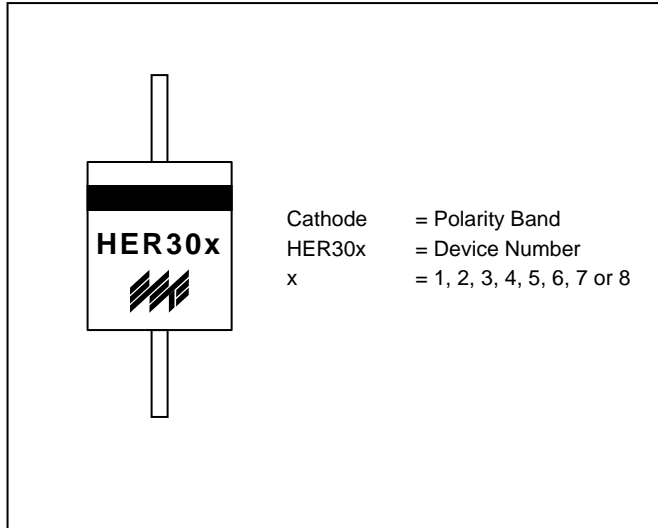
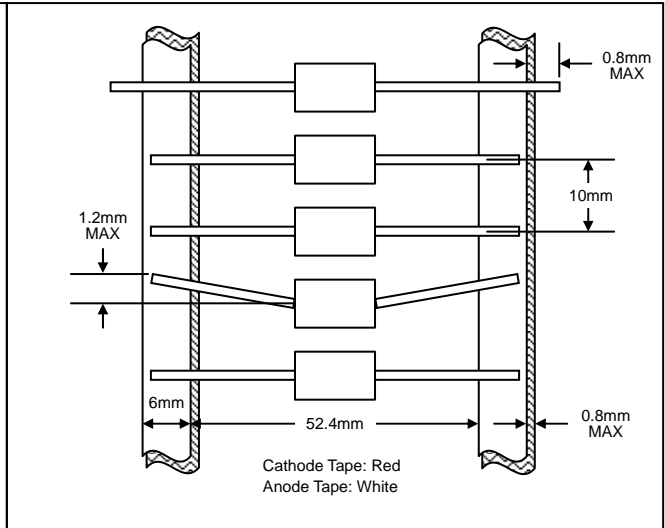


Fig. 6 Typical Junction Capacitance

MARKING INFORMATION

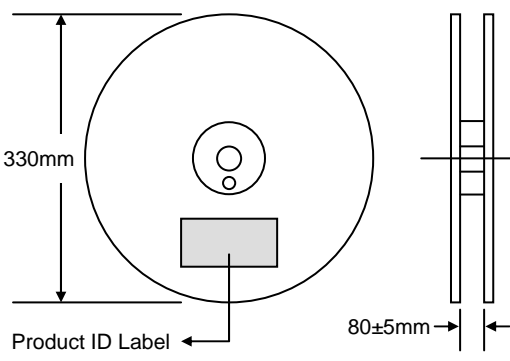


TAPING SPECIFICATIONS



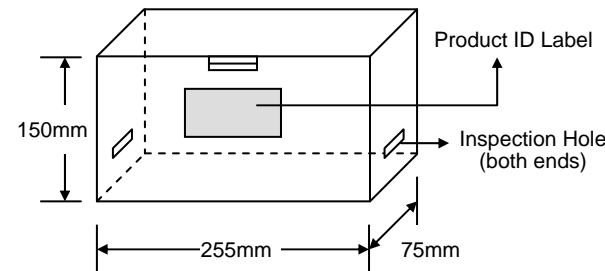
PACKAGING INFORMATION

TAPE & REEL



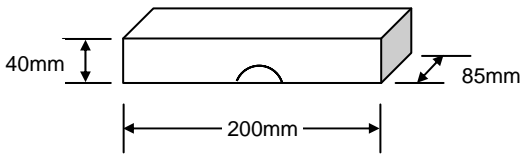
330mm
 Product ID Label
 80±5mm

TAPE & BOX



150mm
 Product ID Label
 Inspection Hole (both ends)
 255mm
 75mm

BULK



40mm
 200mm
 85mm


Packaging	Reel Diameter / Box Size (mm)	Quantity (PCS)	Carton Size (mm)	Quantity (PCS)	Approx. Gross Weight (KG)
TAPE & REEL	330	1,200	370 x 370 x 420	6,000	10.0
TAPE & BOX	255 x 75 x 150	1,200	400 x 273 x 415	12,000	17.0
BULK	200 x 85 x 40	500	459 x 214 x 256	12,500	16.0

Note: 1. Paper reel, white or gray color. Core material: plastic or metal.
 2. Components are packed in accordance with EIA standard RS-296-E.

ORDERING INFORMATION

Product No.	Package Type	Shipping Quantity
HER30x-T3	DO-201AD	1200/Tape & Reel
HER30x-TB	DO-201AD	1200/Tape & Box
HER30x	DO-201AD	500 Units/Box

1. Products listed in **bold** are WTE **Preferred** devices.
2. Shipping quantity given is for minimum packing quantity only. For minimum order quantity, please consult the Sales Department.
3. **To order RoHS / Lead Free version (with Lead Free finish), add "-LF" suffix to part number above. For example, HER301-TB-LF.**

WON-TOP ELECTRONICS and  are registered trademarks of Won-Top Electronics Co., Ltd (WTE). WTE has checked all information carefully and believes it to be correct and accurate. However, WTE cannot assume any responsibility for inaccuracies. Furthermore, this information does not give the purchaser of semiconductor devices any license under patent rights to manufacturer. WTE reserves the right to change any or all information herein without further notice.

WARNING: DO NOT USE IN LIFE SUPPORT EQUIPMENT. WTE power semiconductor products are not authorized for use as critical components in life support devices or systems without the express written approval.

Won-Top Electronics Co., Ltd.
No. 44 Yu Kang North 3rd Road,
Chine Chen Dist., Kaohsiung 806, Taiwan
Phone: 886-7-822-5408 or 886-7-822-5410
Fax: 886-7-822-5417
Email: sales@wontop.com
Internet: <http://www.wontop.com>

We power your everyday.