

Features

- Diffused Junction
- Low Forward Voltage Drop
- High Current Capability
- High Reliability
- High Surge Current Capability



Mechanical Data

- Case: DO-15, Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band
- Weight: 0.40 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-15		
Dim	Min	Max
A	25.4	—
B	5.50	7.62
C	0.71	0.864
D	2.60	3.60
All Dimensions in mm		

Maximum Ratings and Electrical Characteristics @ $T_A=25^\circ\text{C}$ unless otherwise specified

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

Characteristic	Symbol	HER 201	HER 202	HER 203	HER 204	HER 205	HER 206	HER 207	HER 208	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)	I_O	2.0								A	
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	60								A	
Forward Voltage @ $I_F = 2.0A$	V_{FM}	1.0			1.3		1.7			V	
Peak Reverse Current @ $T_A = 25^\circ\text{C}$ At Rated DC Blocking Voltage @ $T_A = 100^\circ\text{C}$	I_{RM}	5.0					100				μA
Reverse Recovery Time (Note 2)	t_{rr}	50					75				nS
Typical Junction Capacitance (Note 3)	C_j	60					40				pF
Operating Temperature Range	T_j	-65 to +125								$^\circ\text{C}$	
Storage Temperature Range	T_{STG}	-65 to +150								$^\circ\text{C}$	

Note: 1. Leads maintained at ambient temperature at a distance of 9.5mm from the case
2. Measured with $I_F = 0.5A$, $I_R = 1.0A$, $IRR = 0.25A$. See figure 5.
3. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.

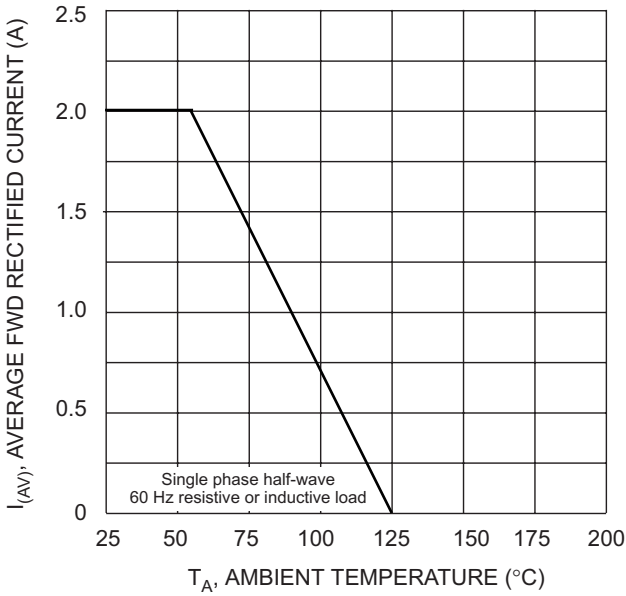


Fig. 1 Forward Current Derating Curve

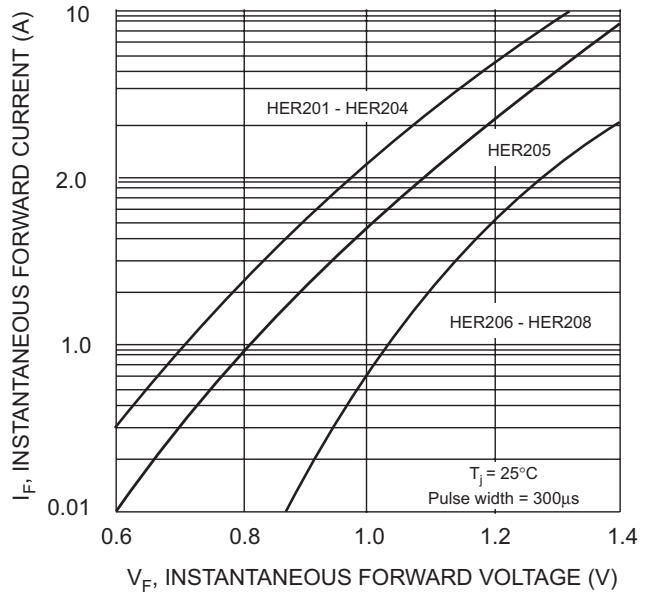


Fig. 2 Typical Forward Characteristics

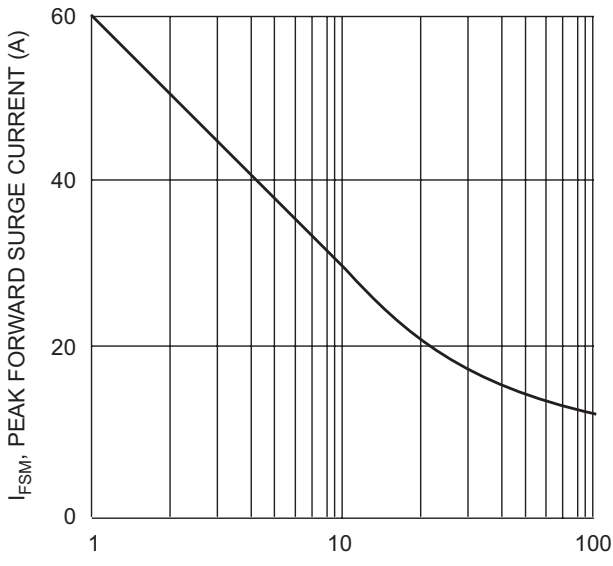


Fig. 3 Peak Forward Surge Current

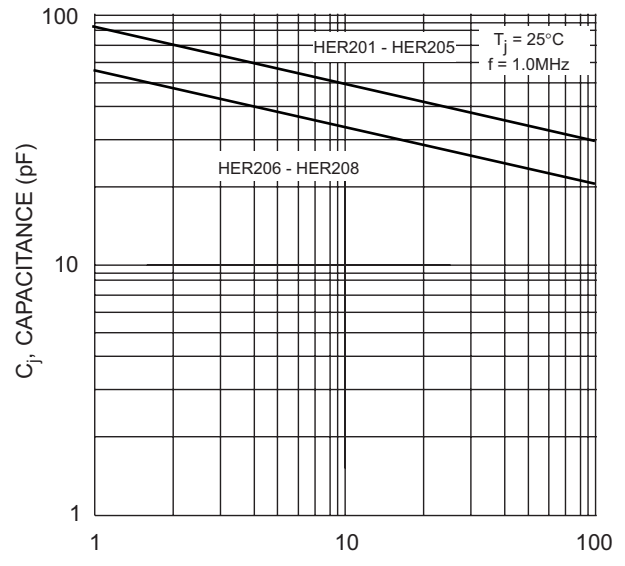
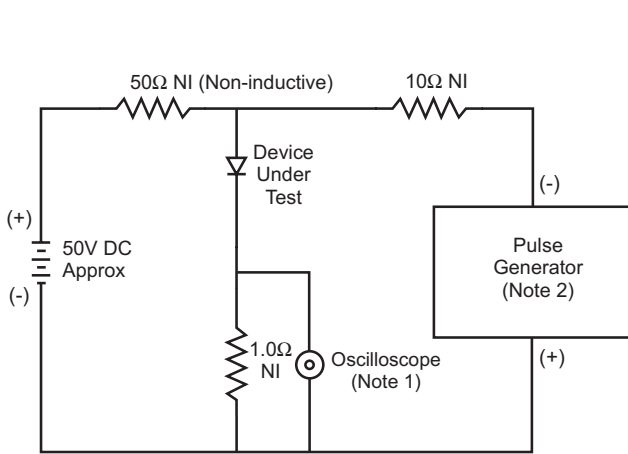
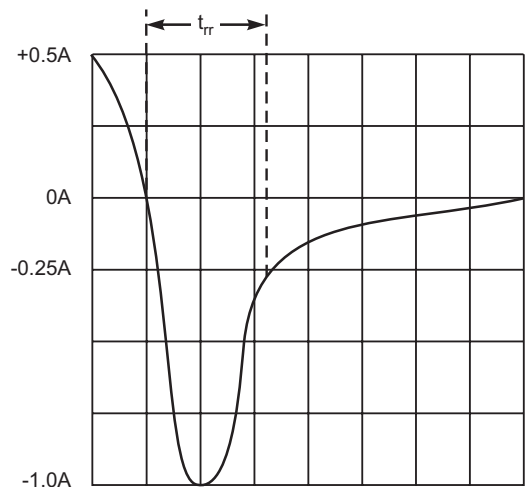


Fig. 4 Typical Junction Capacitance



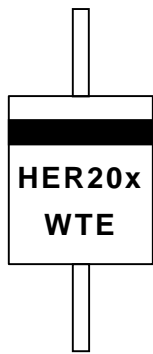
- Notes:
1. Rise Time = 7.0ns max. Input Impedance = 1.0MΩ, 22pF.
 2. Rise Time = 10ns max. Input Impedance = 50Ω.



Set time base for 5/10ns/cm

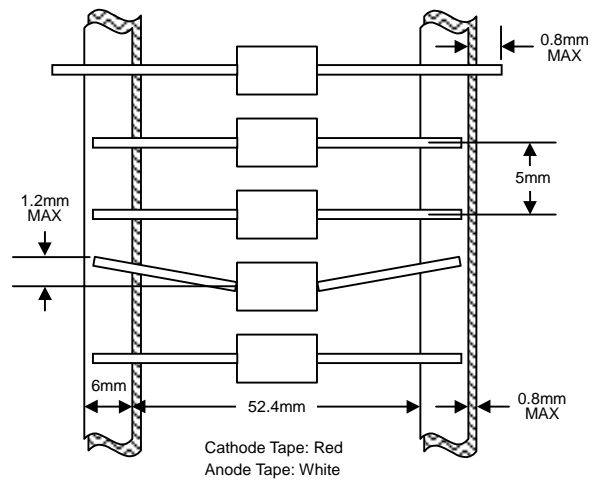
Fig. 5 Reverse Recovery Time Characteristic and Test Circuit

MARKING INFORMATION

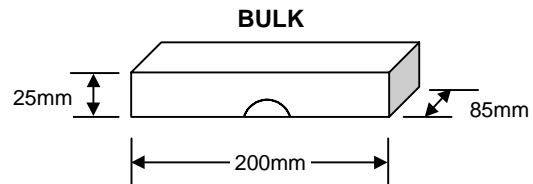
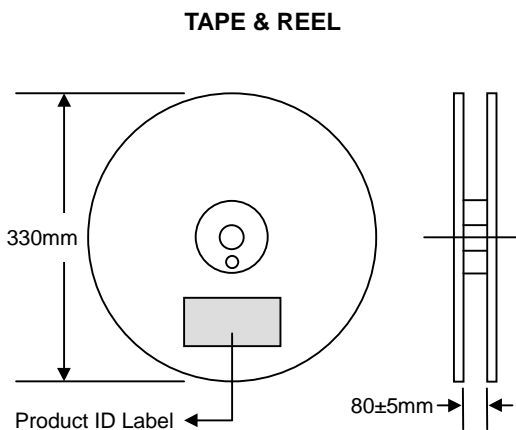


Cathode = Polarity Band
 HER20x = Device Number
 x = 1, 2, 3, 4, 5, 6, 7 or 8
 WTE = Manufacturer's Logo

TAPING SPECIFICATIONS



PACKAGING INFORMATION



Packaging	Reel Diameter / Box Size (mm)	Quantity (PCS)	Carton Size (mm)	Quantity (PCS)	Approx. Gross Weight (KG)
TAPE & REEL	330	4,000	370 x 370 x 420	20,000	12.0
TAPE & BOX	255 x 75 x 150	3,000	400 x 273 x 415	30,000	15.0
BULK	200 x 85 x 25	1,000	459 x 214 x 256	40,000	17.5

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
HER201-T3	DO-15	4000/Tape & Reel
HER201-TB	DO-15	3000/Tape & Box
HER201	DO-15	1000 Units/Box
HER202-T3	DO-15	4000/Tape & Reel
HER202-TB	DO-15	3000/Tape & Box
HER202	DO-15	1000 Units/Box
HER203-T3	DO-15	4000/Tape & Reel
HER203-TB	DO-15	3000/Tape & Box
HER203	DO-15	1000 Units/Box
HER204-T3	DO-15	4000/Tape & Reel
HER204-TB	DO-15	3000/Tape & Box
HER204	DO-15	1000 Units/Box
HER205-T3	DO-15	4000/Tape & Reel
HER205-TB	DO-15	3000/Tape & Box
HER205	DO-15	1000 Units/Box
HER206-T3	DO-15	4000/Tape & Reel
HER206-TB	DO-15	3000/Tape & Box
HER206	DO-15	1000 Units/Box
HER207-T3	DO-15	4000/Tape & Reel
HER207-TB	DO-15	3000/Tape & Box
HER207	DO-15	1000 Units/Box
HER208-T3	DO-15	4000/Tape & Reel
HER208-TB	DO-15	3000/Tape & Box
HER208	DO-15	1000 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, HER201-TB-LF.**

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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.

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