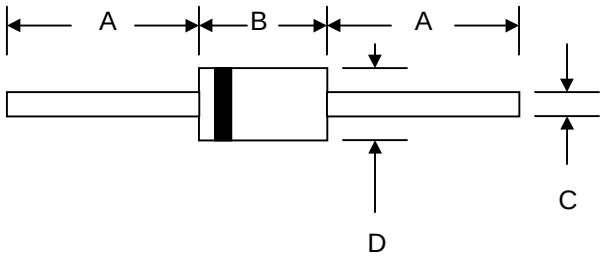
POWER SEMICONDUCTORS

HER101G – HER108G

1.0A GLASS PASSIVATED ULTRAFAST DIODE

Features

- Glass Passivated Die Construction
- Low Forward Voltage Drop
- High Current Capability
- High Reliability
- High Surge Current Capability



DO-41		
Dim	**Min**	**Max**
A	25.4	—
B	4.06	5.21
C	0.71	0.864
D	2.00	2.72
All Dimensions in mm		

Mechanical Data

- Case: DO-41, Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band
- Weight: 0.34 grams (approx.)
- Mounting Position: Any
- Marking: Type Number
- **Lead Free: For RoHS / Lead Free Version, Add "-LF" Suffix to Part Number, See Page 4**

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 101G	HER 102G	HER 103G	HER 104G	HER 105G	HER 106G	HER 107G	HER 108G	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	50	100	200	300	400	600	800	1000	V
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	1.0								A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	30								A
Forward Voltage @I_F = 1.0A	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}	5.0 100								μA
Reverse Recovery Time (Note 2)	t_{rr}	50					75			nS
Typical Junction Capacitance (Note 3)	C_j	20					15			pF
Operating Temperature Range	T_j	-65 to +150								°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 IF = 0.5A, IR = 1.0A, IRR = 0.25A. See figure 5.
3. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.

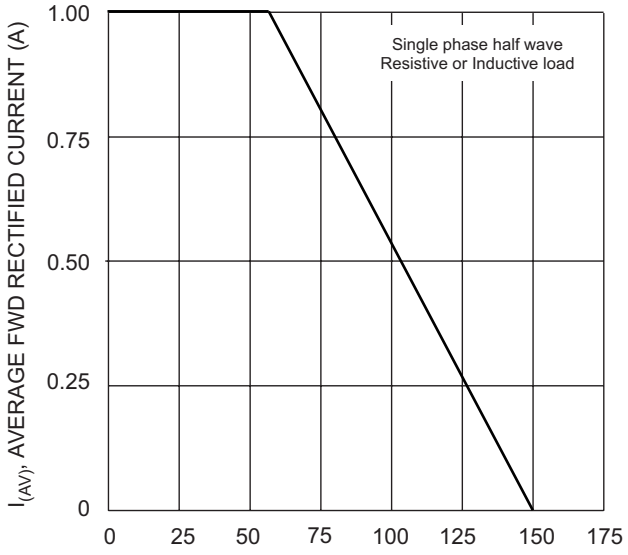


Fig. 1 Forward Current Derating Curve

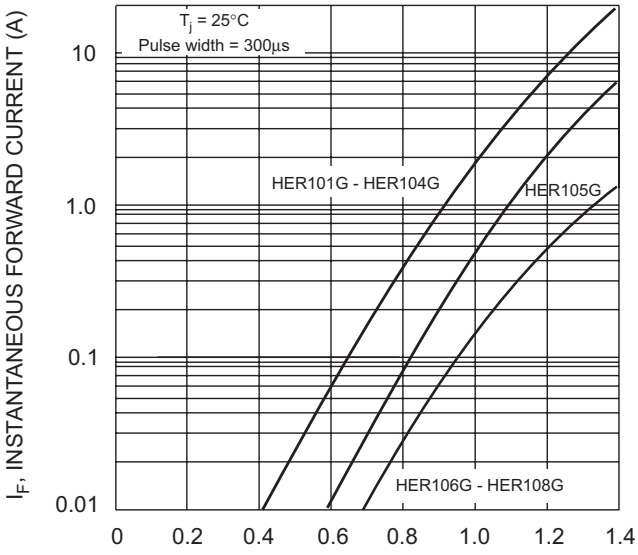


Fig. 2 Typical Forward Characteristics

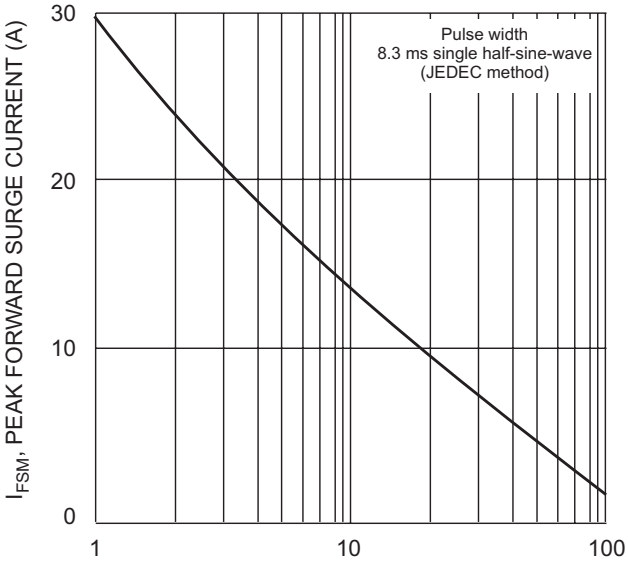


Fig. 3 Peak Forward Surge Current

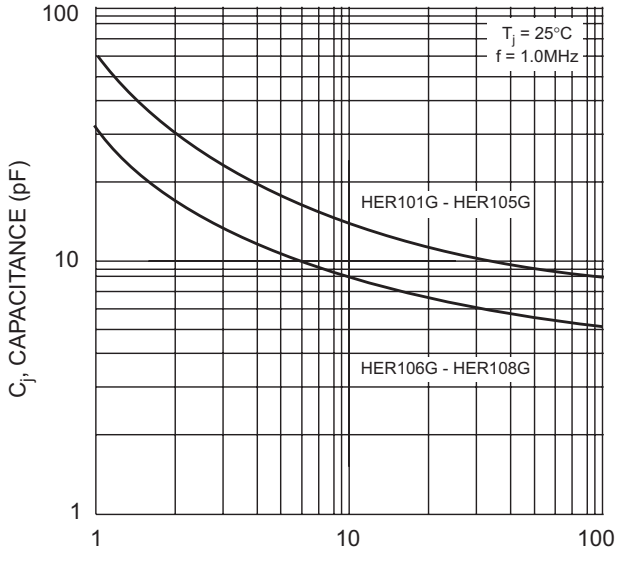
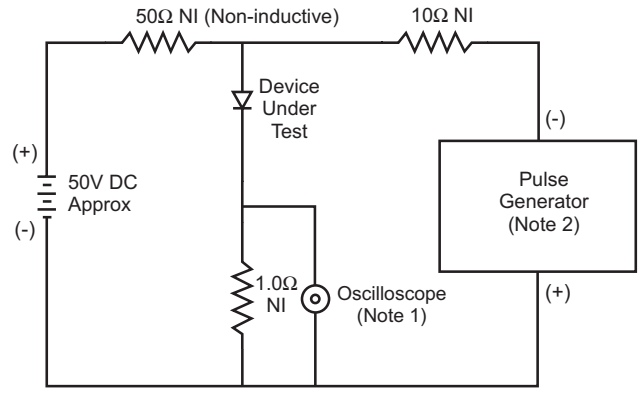


Fig. 4 Typical Junction Capacitance



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

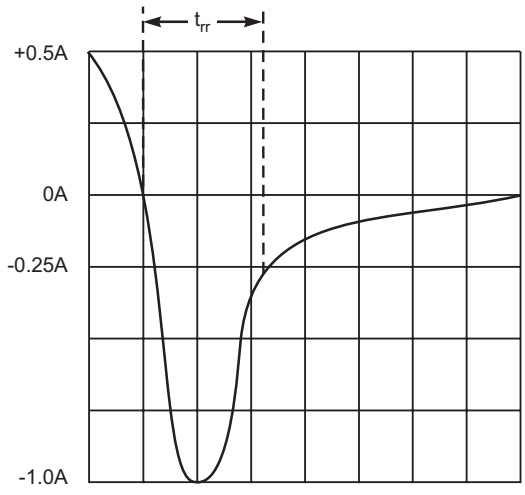
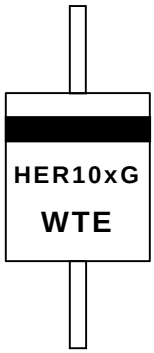


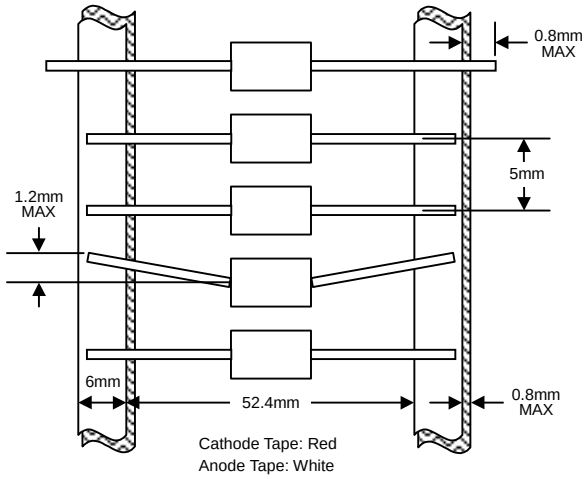
Fig. 5 Reverse Recovery Time Characteristic and Test Circuit

MARKING INFORMATION



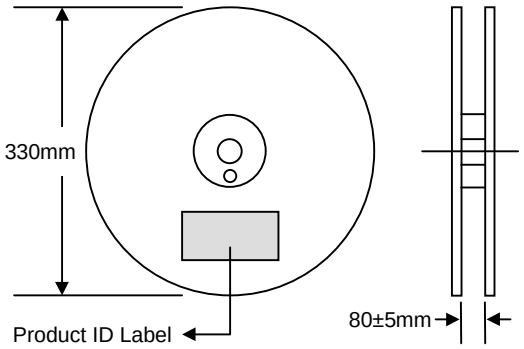
Cathode	= Polarity Band
HER10xG	= Device Number
x	= 1, 2, 3, 4, 5, 6, 7 or 8
WTE	= Manufacturer's Logo

TAPING SPECIFICATIONS

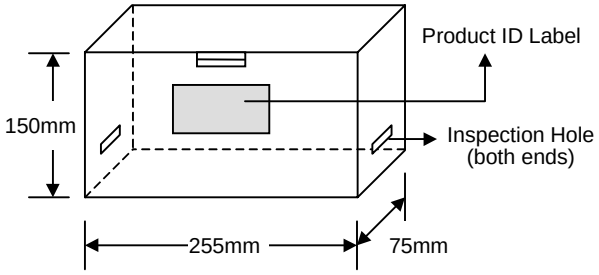


PACKAGING INFORMATION

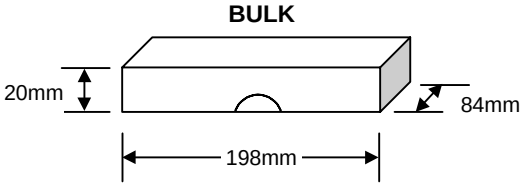
TAPE & REEL



TAPE & BOX



BULK



Packaging	Reel Diameter / Box Size (mm)	Quantity (PCS)	Carton Size (mm)	Quantity (PCS)	Approx. Gross Weight (KG)
TAPE & REEL	330	5,000	370 x 370 x 420	25,000	13.0
TAPE & BOX	255 x 75 x 150	5,000	400 x 273 x 415	50,000	21.0
BULK	198 x 84 x 20	1,000	459 x 214 x 256	50,000	19.5

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
HER101G-T3	DO-41	5000/Tape & Reel
HER101G-TB	DO-41	5000/Tape & Box
HER101G	DO-41	1000 Units/Box
HER102G-T3	DO-41	5000/Tape & Reel
HER102G-TB	DO-41	5000/Tape & Box
HER102G	DO-41	1000 Units/Box
HER103G-T3	DO-41	5000/Tape & Reel
HER103G-TB	DO-41	5000/Tape & Box
HER103G	DO-41	1000 Units/Box
HER104G-T3	DO-41	5000/Tape & Reel
HER104G-TB	DO-41	5000/Tape & Box
HER104G	DO-41	1000 Units/Box
HER105G-T3	DO-41	5000/Tape & Reel
HER105G-TB	DO-41	5000/Tape & Box
HER105G	DO-41	1000 Units/Box
HER106G-T3	DO-41	5000/Tape & Reel
HER106G-TB	DO-41	5000/Tape & Box
HER106G	DO-41	1000 Units/Box
HER107G-T3	DO-41	5000/Tape & Reel
HER107G-TB	DO-41	5000/Tape & Box
HER107G	DO-41	1000 Units/Box
HER108G-T3	DO-41	5000/Tape & Reel
HER108G-TB	DO-41	5000/Tape & Box
HER108G	DO-41	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, HER101G-TB-LF**.

Won-Top Electronics Co., Ltd.
No. 44 Yu Kang North 3rd Road, Chine Chen Dist., Kaohsiung, 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.

