

HER3001PT – HER3008PT

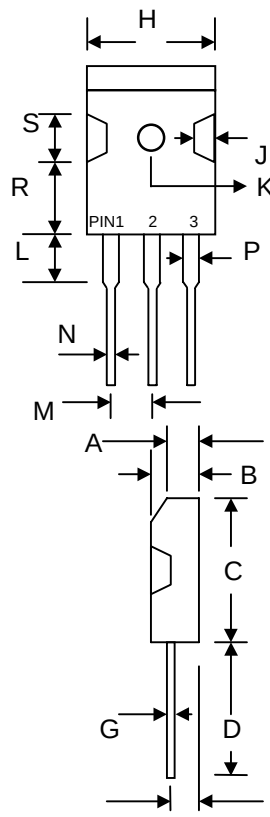
30A HIGH EFFICIENCY GLASS PASSIVATED RECTIFIER

Features

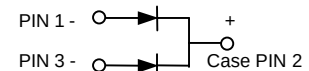
- Glass Passivated Die Construction
- Ultra-Fast Switching
- High Current Capability
- Low Reverse Leakage Current
- High Surge Current Capability
- Plastic Material has UL Flammability Classification 94V-O

Mechanical Data

- Case: Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-750, Method 2026
- Polarity: See Diagram
- Weight: 5.6 grams (approx.)
- Mounting Position: Any
- Marking: Type Number



TO-3P		
Dim	Min	Max
A	3.20	3.50
B	4.59	5.16
C	20.80	21.30
D	19.70	20.20
E	2.10	2.40
G	0.51	0.76
H	15.90	16.40
J	1.70	2.70
K	3.10 Ø	3.30 Ø
L	3.50	4.51
M	5.20	5.70
N	1.12	1.22
P	2.90	3.30
R	11.70	12.80
S	4.30 Typical	
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 3001PT	HER 3002PT	HER 3003PT	HER 3004PT	HER 3005PT	HER 3006PT	HER 3007PT	HER 3008PT	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	VRRM VRWM VR	50	100	200	300	400	600	800	1000	V
RMS Reverse Voltage	VR(RMS)	35	70	140	210	280	420	560	700	V
Average Rectified Output Current @T _C = 100°C	Io	30								A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	IFSM	300								A
Forward Voltage @IF = 15A	VFM	1.0				1.3	1.7			V
Peak Reverse Current @TA = 25°C At Rated DC Blocking Voltage @TA = 125°C	IRM	10 500								µA
Reverse Recovery Time (Note 1)	trr	50					80			nS
Typical Junction Capacitance (Note 2)	Cj	175					145			pF
Operating and Storage Temperature Range	Tj, TSTG	-55 to +150								°C

Note: 1. Measured with I_F = 0.5A, I_R = 1.0A, I_{RR} = 0.25A. See figure 5.
 2. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.

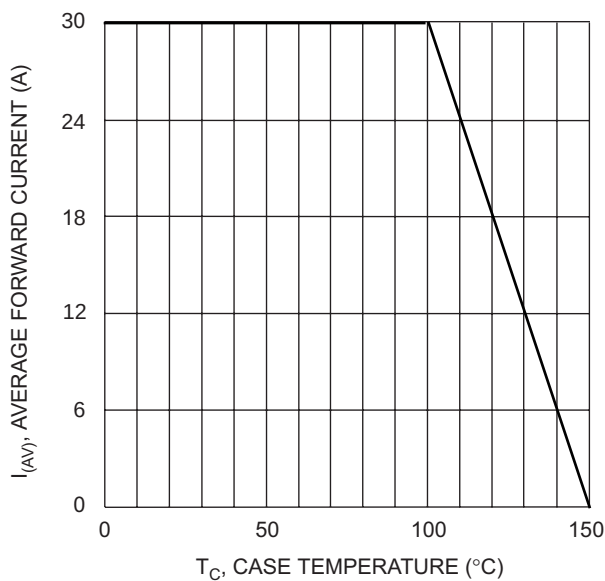


Fig. 1 Forward Current Derating Curve

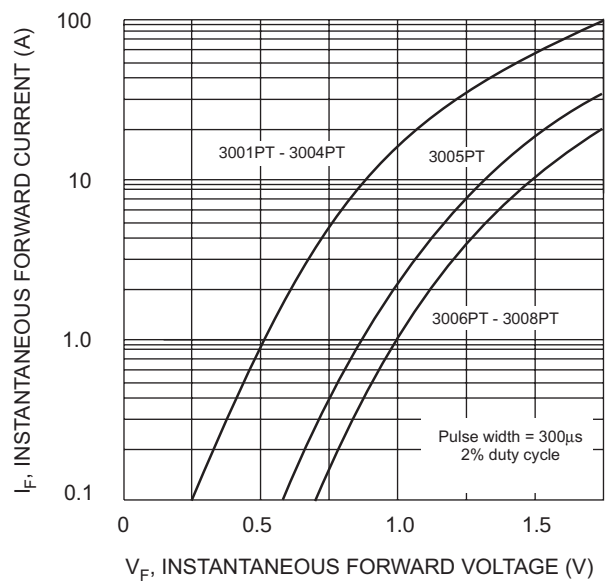


Fig. 2 Typical Forward Characteristics

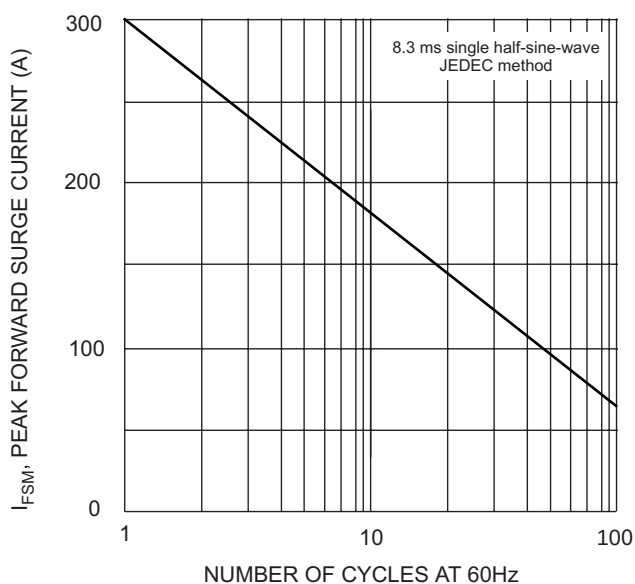


Fig. 3 Maximum Non-Repetitive Surge Current

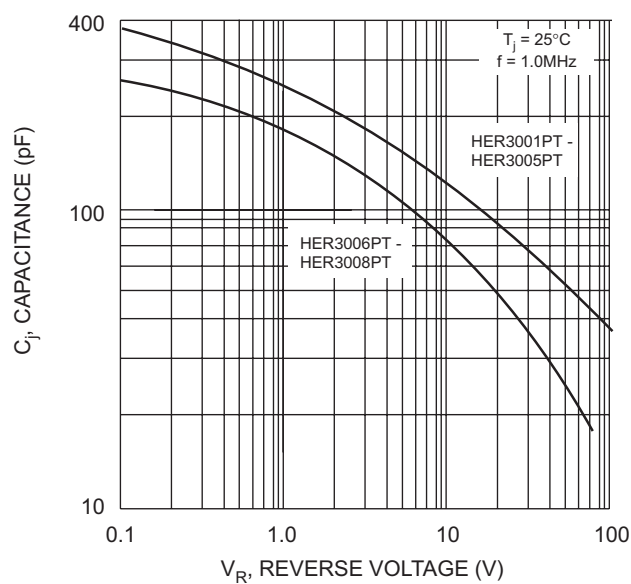
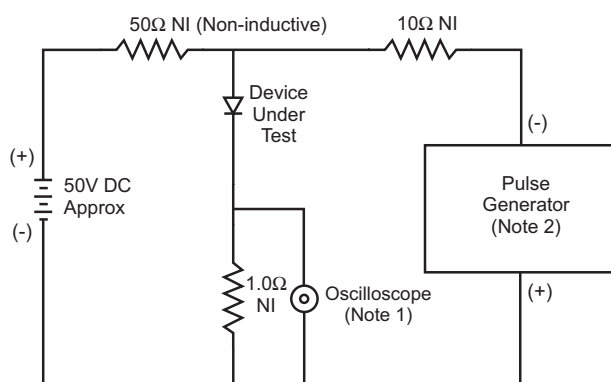


Fig. 4 Typical Junction Capacitance



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

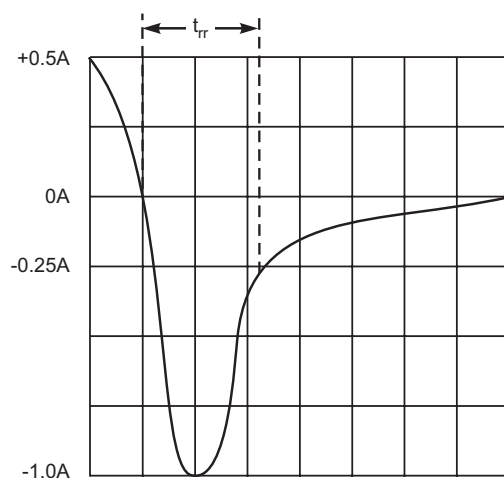


Fig. 5 Reverse Recovery Time Characteristic and Test Circuit

ORDERING INFORMATION

Product No.	Package Type	Shipping Quantity
HER3001PT	TO-3P	30 Units/Tube
HER3002PT	TO-3P	30 Units/Tube
HER3003PT	TO-3P	30 Units/Tube
HER3004PT	TO-3P	30 Units/Tube
HER3005PT	TO-3P	30 Units/Tube
HER3006PT	TO-3P	30 Units/Tube
HER3007PT	TO-3P	30 Units/Tube
HER3008PT	TO-3P	30 Units/Tube

Shipping quantity given is for minimum packing quantity only. For minimum order quantity, please consult the Sales Department.

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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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