

## HER1601PT THRU HER1608PT

## Glass Passivated High Efficient Rectifiers

#### **Features**

- \* Superfast recovery time, high voltage
- \* Low forward voltage, high current capability
- \* Low thermal resistance
- \* Low power loss, high efficiency









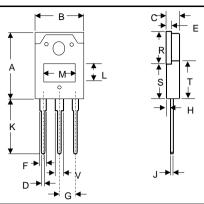
\* Case: TO-3P

\* Molding compound, UL flammability classification rating 94V-0

\* Terminal: Matte tin plated leads, solderable per JESD22-B102 Meet JESD 201 class 2 whisker test

\* Polarity: As marked

\* Mounting torque: 1.13 Nm max. \* Weight: 5.6g (approximately)



TO-3P							
DIM	INC	CHES	MM				
	MIN	MAX	MIN	MAX			
Α	0.771	0.795	19.60	20.20			
В	0.606	0.622	15.40	15.80			
С	0.181	0.197	4.60	5.00			
D	0.044	0.048	1.12	1.22			
Е	0.058	0.060	1.48	1.52			
F	0.071	0.086	1.80	2.20			
G	0.208	0.220	5.30	5.60			
Н	0.051	0.059	1.30	1.50			
J	0.021	0.026	0.55	0.65			
K	0.787	0.811	20.00	20.60			
L	0.342	0.358	8.70	9.10			
М	0.421	0.437	10.70	11.10			
R	0.267	0.283	6.80	7.20			
S	0.500	0.515	12.70	13.10			
Т	0.539	0.551	13.70	14.00			
V	0.110	0.126	2.80	3.20			

### Maximum Ratings and Electrical Characteristics (T<sub>A</sub>=25 °C unless otherwise noted)

PARAMETER		SYMBOL	HER 1601 PT	HER 1602 PT	HER 1603 PT	HER 1604 PT	HER 1605 PT	HER 1606 PT	HER 1607 PT	HER 1608 PT	UNIT
Maximum repetitive peak reverse voltage		$V_{RRM}$	50	100	200	300	400	600	800	1000	V
Maximum RMS voltage		$V_{RMS}$	35	70	140	210	280	420	560	700	V
Maximum DC blocking voltage		$V_{DC}$	50	100	200	300	400	600	800	1000	V
Maximum average forward rectified current		I <sub>F(AV)</sub>	16						Α		
Peak forward surge current, 8.3 ms single half sine-wave superimposed on rated load		I <sub>FSM</sub>	200						Α		
Maximum instantaneous forward voltage (Note 1)	I <sub>F</sub> =8A	V <sub>F</sub>	1.0 1.3 1.7			V					
Maximum reverse current @ rated VR	T <sub>J</sub> =25°C		10.0								
Maximum reverse current @ rated VR	T <sub>J</sub> =125°C	I <sub>R</sub>	500								μA
Maximum reverse recovery time (Note 2)		trr	50 80					ns			
Typical junction capacitance (Note 3)		CJ	85 60						pF		
Operating junction temperature range		$T_J$	- 55 to +150					°C			
Storage temperature range		T <sub>STG</sub>	- 55 to +150					°C			

Note 1: Pulse test with PW=300µs, 1% duty cycle

Note 2: Test conditions: IF=0.5A, IR=1.0A, IRR=0.25A

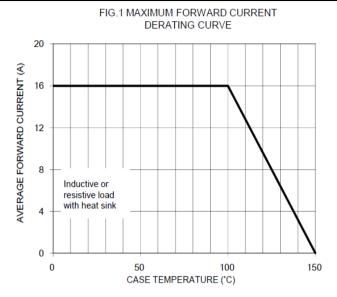
Note 3: Measured at 1 MHz and applied reverse voltage of 4.0V DC.

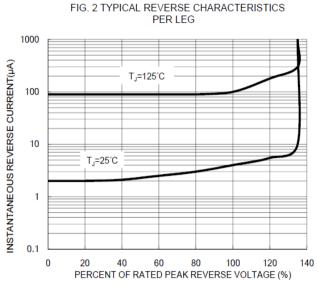
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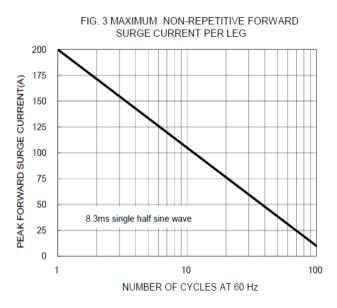


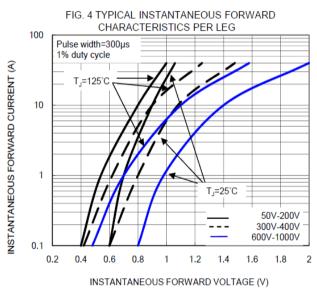
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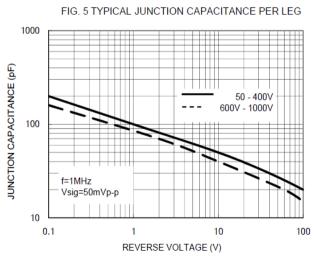
### **Ratings and Characteristic Curves**

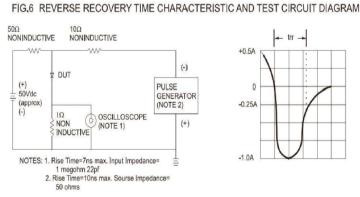












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#### **Ordering Information**

Part No.	Package	Packing Code	Packing
HER1601PT THRU HER1608PT	TO-3P	TXB	30pcs/Tube

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