

HERF801 THRU HERF808

High Efficiency Glass Passivated Rectifiers

Reverse Voltage - 50 to 1000 Volts Forward Current - 8.0 Ampere

Pb

RoHS

.114 (2.9)

.098 (2.5)

Features

- Low switching noise
- Low thermal resistance
- Low forward voltage drop
- High current capability
- High fast switching capability
- High surge capacity

Mechanical Data

- Case: JEDEC ITO-220AC Molded plastic
- Polarity: Color band denotes cathode
- Mounting position: Any

Applications

• For use in SMPS, high frequency inverters, PWM and polarity protection applications

ITO-220AC .138 (3.5) .189 (4.8) .118 (3.0) .173 (4.4) .406 (10.3) .118 (3.0) .118 (3.0) .102 (2.6) 386 (9.8) .102 (2.6)

.04 Max.

(1.0)

.059 (1.5)

.043 (1.1)

.031 (0.80)

.020 (0.50) .105 (2.67) .028 (0.70) 020 (0.50) .095 (2.41)

Package Outline Dimensions in Inches (Millimeters)

157 (4.0) 118 (3.0)

.622 (15.8) .583 (14.8)

.551 (14.0)

.504 (12.8)

Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

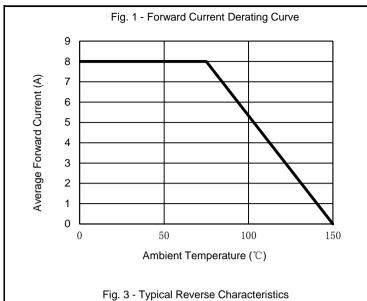
Characteristics	Symbol	HERF	HERF	HERF	HERF	HERF	HERF	HERF	HERF	Unit
	Symbol	801	802	803	804	805	806	807	808	
Maximum Repetitive Peak Reverse Voltage	VRRM	50	100	200	300	400	600	800	1000	٧
Maximum RMS Voltage	VRMS	35	70	140	210	280	420	560	700	٧
Maximum DC Blocking Voltage	VDC	50	100	200	300	400	600	800	1000	٧
Maximum Average Forward Rectified Current @Ta=75 ℃	lo	8.0							Α	
Peak Forward Surge Current, 8.3mS Single Half Sine-Wave,	Iron	IFSM 150							Α	
Superimposed on Rated Load (JEDEC Method)	IFSM	130								A
Typical Thermal Resistance Junction to Ambient	Reja	2.5							°C/W	
Typical Junction Capacitance (Note1)	Сл	40							pF	
Peak Forward Voltage at 8.0 A DC	VF	1.0 1.3 1.7					V			
Maximum DC Reverse Current at Rated @TJ=25℃	l _R	10 150								μА
DC Blocking Voltage @TJ=100℃	IK IK									
Maximum Reverse Recovery Time (Note 2)	Trr	60 75						'5	nS	
Operating and Storage Temperature Range	TJ,TsTG		-55 to + 150							$^{\circ}$

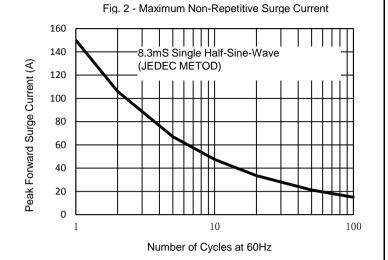
Notes: 1.Measured at 1.0 MHz and applied reverse voltage of 4.0V DC.

- 2.Measured with IF=0.5A,IR=1A,IRR=0.25A.
- 3. The typical data above is for reference only.

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1000 TJ=100° C TJ=100° C TJ=25° C TJ=25

Percent of Rated Peak Reverse Voltage (%)

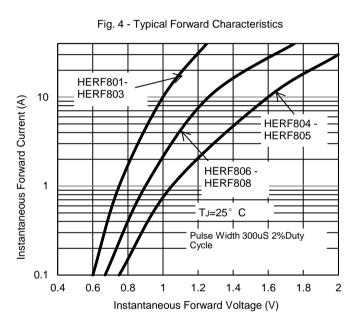
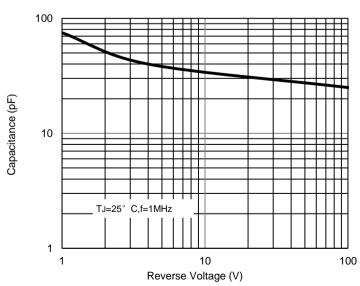


Fig. 5 - Typical Junction Capacitance



The curve above is for reference only.



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