

<b>High Efficiency (Ultra Fast) Rectifiers</b> <b>高效 (超快恢复) 整流管</b>	<b>Reverse Voltage - 50 to 1000 Volts</b> <b>反向电压 50-1000V</b> <b>Forward Current - 3.0 Ampere</b> <b>正向电流 3.0 A</b>
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**Features 特征**

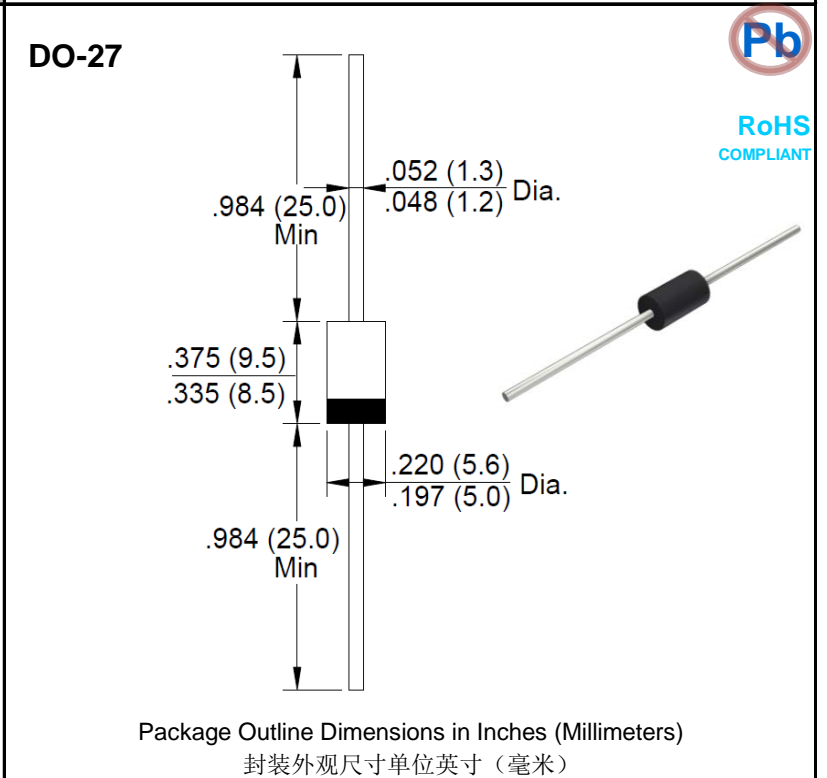
- Low cost 低成本
- Ultra fast switching for high efficiency 高效超快恢复
- Low reverse leakage current 反向漏电流低
- Low forward voltage drop 正向压降低
- High current capability 通电能力强
- The plastic material carries UL recognition 94V-0  
塑封材料符合UL94V-0等级

**Mechanical Data 外观信息**

- Case: JEDEC DO-27 Molded plastic 本体: JEDEC DO-27塑封
- Polarity: Color band denotes cathode 极性: 阴极色环标识
- Mounting position: Any 安装位置: 不限

**Applications 应用**

- For use in SMPS, high frequency inverters, PWM and polarity protection applications  
用于开关电源, 高频变换器, 脉宽调制器和极性保护等应用



**Maximum Ratings and Electrical Characteristics 最大额定值及电气特性**

Rating at 25°C ambient temperature unless otherwise specified. 环境温度25°C, 除非特别说明。  
 Single phase, half wave, 60Hz, resistive or inductive load. 单相半波, 60Hz, 阻性或感性负载。  
 For capacitive load, derate current by 20%. 对于电容性负载, 降低20%的额定电流。

Characteristics 特性	Symbol 符号	HER301	HER302	HER303	HER304	HER305	HER306	HER307	HER308	Unit 单位
		UF3001	UF3002	UF3003	UF3004	UF3005	UF3006	UF3007	UF3008	
Maximum Repetitive Peak Reverse Voltage 最大重复峰值电压	V <sub>RRM</sub>	50	100	200	300	400	600	800	1000	V
Maximum RMS Voltage 最大有效反向电压	V <sub>RMS</sub>	35	70	140	210	280	420	560	700	V
Maximum DC Blocking Voltage 最大直流阻断电压	V <sub>DC</sub>	50	100	200	300	400	600	800	1000	V
Maximum Average Forward Rectified Current @T <sub>A</sub> =55 °C 最大正向平均整流电流	I(AV)	3.0								A
Peak Forward Surge Current, 8.3ms Single Half Sine-Wave, Superimposed on Rated Load (JEDEC Method) 8.3ms单一正弦半波叠加在额定负载上的浪涌能力 (JEDEC方法)	I <sub>FSM</sub>	150								A
Peak Forward Voltage at 3.0 A DC 在3.0 A下的正向峰值电压	V <sub>F</sub>	1.0		1.3		1.7			V	
Maximum DC Reverse Current at Rated @T <sub>J</sub> =25°C DC Blocking Voltage @T <sub>J</sub> =100°C 在额定直流电压下的最大反向直流电流	I <sub>R</sub>	5.0								μA
Maximum Reverse Recovery Time (Note 1) 最大反向恢复时间 (备注1)	T <sub>RR</sub>	50				75				nS
Typical Junction Capacitance (Note2) 典型的结电容 (备注2)	C <sub>J</sub>	50				30				pF
Typical Thermal Resistance Junction to Ambient 结到环境的典型热阻值	R <sub>θJA</sub>	20								°C/W
Operating Junction Temperature Range 结温工作范围	T <sub>J</sub>	-55 to +150								°C
Storage Temperature Range 储存温度范围	T <sub>STG</sub>	-55 to +150								°C

Notes: 1. Measured with I<sub>F</sub>=0.5A, I<sub>R</sub>=1A, I<sub>RR</sub>=0.25A. 备注: 在I<sub>F</sub>=0.5A, I<sub>R</sub>=1A, I<sub>RR</sub>=0.25A下量测。  
 2. Measured at 1.0 MHz and applied reverse voltage of 4.0V DC. 在1.0MHz下和反向电压为4.0V DC下测试。  
 3. The typical data above is for reference only. (典型值仅供参考)。



Fig. 1 - Forward Current Derating Curve

图1 正向电流降额曲线

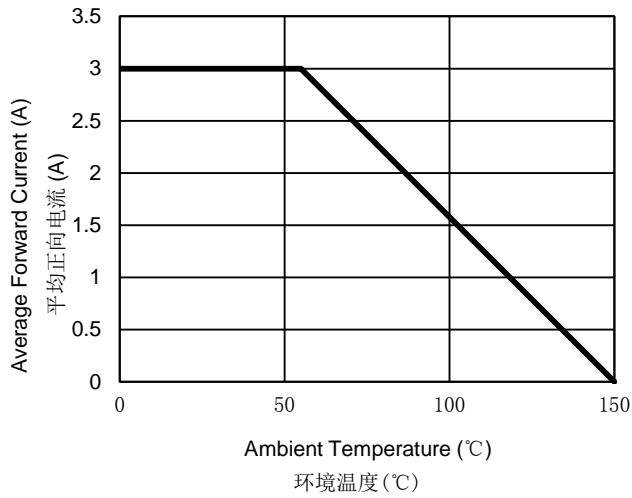


Fig. 2 - Maximum Non-Repetitive Surge Current

图2 最大不重复正向浪涌曲线

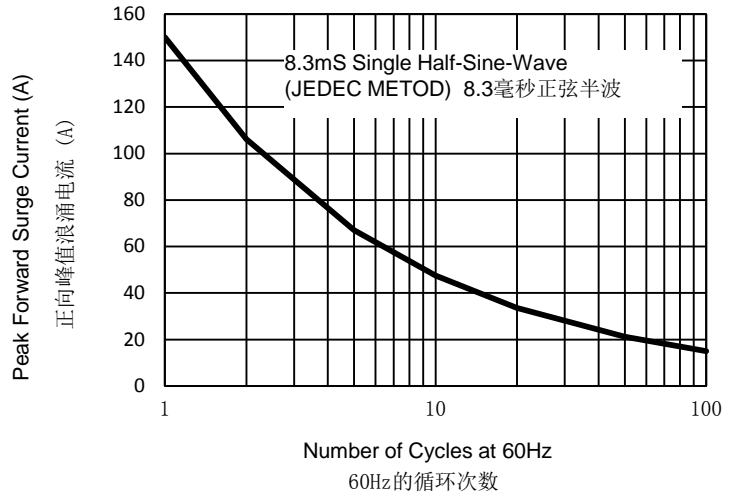


Fig. 3 - Typical Junction Capacitance

图3 典型的结电容

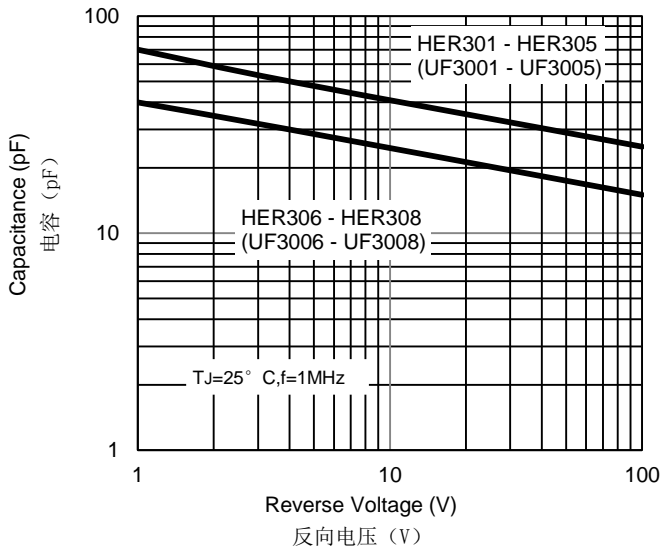


Fig. 4 - Typical Forward Characteristics

图4 典型的正向特性

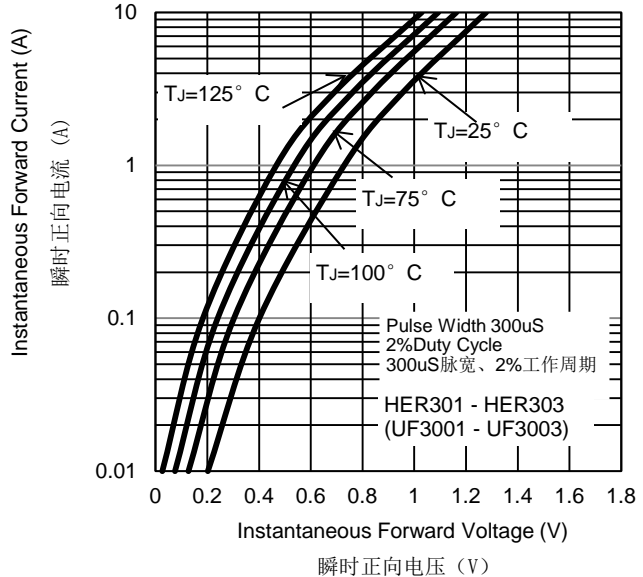


Fig. 5 - Typical Forward Characteristics

图4 典型的正向特性

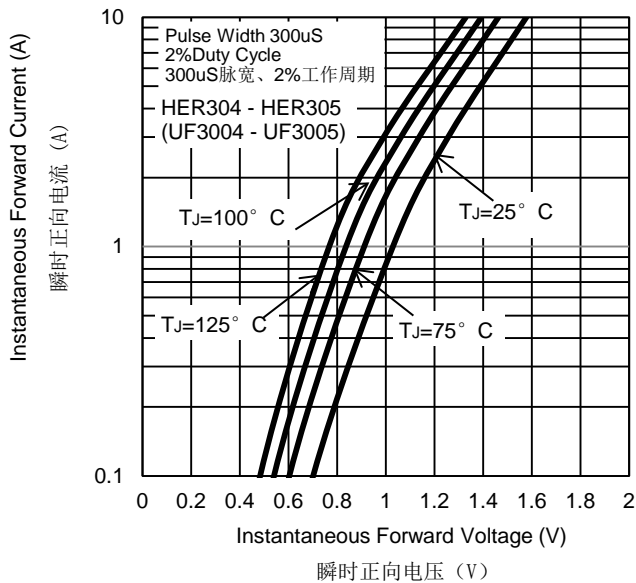
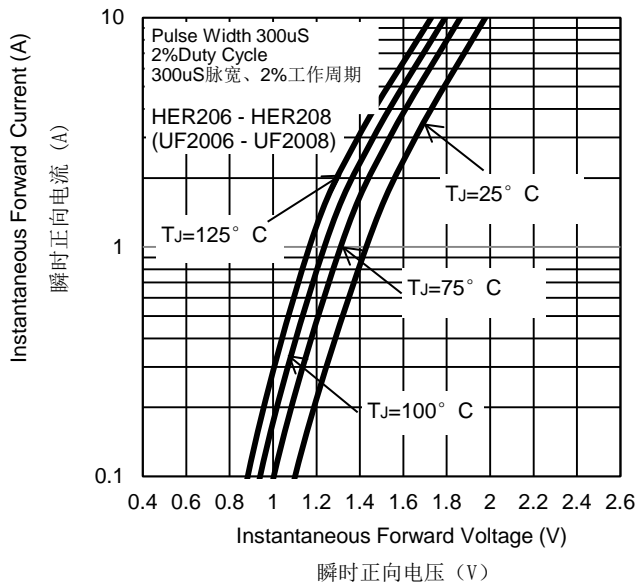


Fig. 6 - Typical Forward Characteristics

图4 典型的正向特性



The curve above is for reference only. 曲线图仅供参考。



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