HERF1601 THRU HERF1606

High Efficiency Glass Passivated Rectifiers
高效玻璃钝化整流管

Reverse Voltage - 50 to 600 Volts
反向电压 50-600V
Forward Current - 16.0 Ampere
正向电流 16.0 A

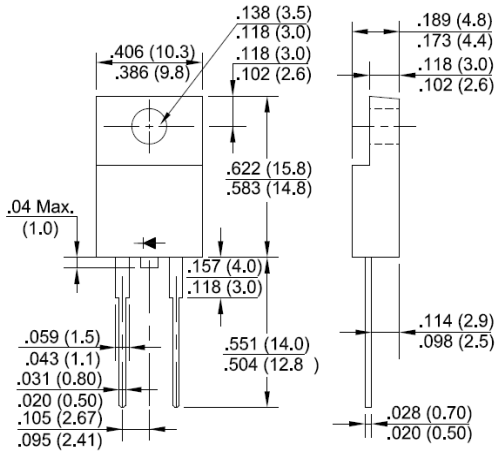
Features 特征
- Low switching noise 低开关噪声
- Low thermal resistance 低热阻
- Low forward voltage drop 正向压降低
- High current capability 通电能力强
- High fast switching capability 超快切换时间
- High surge capacity 浪涌能力强

Mechanical Data 外观信息
- Case: JEDEC ITO-220AC Molded plastic
  本体：JEDEC ITO-220AC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

ITO220AC

RoHS COMPLIANT



Package Outline Dimensions in Inches (Millimeters)
封装外观尺寸单位英寸（毫米）

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

Rating at 25℃ ambient temperature unless otherwise specified. 环境温度25℃，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	HERF 1601	HERF 1602	HERF 1603	HERF 1604	HERF 1605	HERF 1606	Unit 单位
Maximum Repetitive Peak Reverse Voltage 最大重复峰值电压	V_{RRM}	50	100	200	300	400	600	V
Maximum RMS Voltage 最大有效反向电压	V_{RMS}	35	70	140	210	280	420	V
Maximum DC Blocking Voltage 最大直流阻断电压	V_{DC}	50	100	200	300	400	600	V
Maximum Average Forward Rectified Current @T_A=75 ℃ 最大正向平均整流电流	I_O	16.0						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_{FSM}	250						A
Typical Thermal Resistance Junction to Ambient 结到环境的典型热阻值	$R_{\theta JA}$	2.5						℃/W
Typical Junction Capacitance (Note1) 典型的结电容（备注1）	C_J	80						pF
Peak Forward Voltage at 16.0 A DC 在16.0 A下的正向峰值电压	V_F	1.0			1.3		1.7	V
Maximum DC Reverse Current at Rated @T_J=25℃ DC Blocking Voltage @T_J=100℃ 在额定直流电压下的最大反向直流电流	I_R	10 150						μA
Maximum Reverse Recovery Time (Note 2) 最大反向恢复时间（备注2）	T_{RR}	60						nS
Operating and Storage Temperature Range 工作和储存温度范围	T_J,T_{STG}	-55 to + 150						℃

Notes: 1.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。
2.Measured with IF=0.5A,IR=1A,IRR=0.25A. 备注：在IF=0.5A,IR=1A,IRR=0.25A下量测。
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

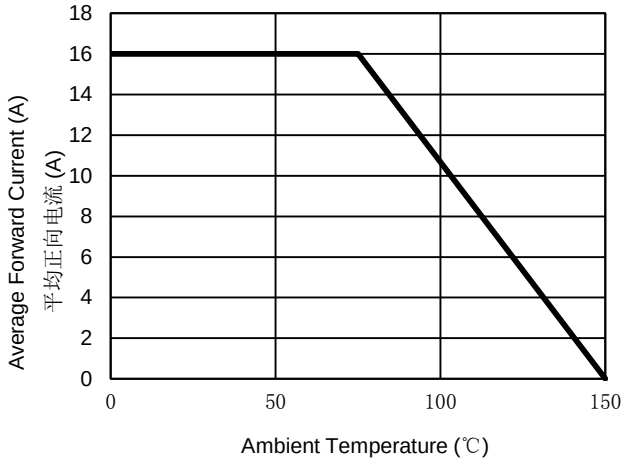


Fig. 2 - Maximum Non-Repetitive Surge Current

图2 最大不重复正向浪涌曲线

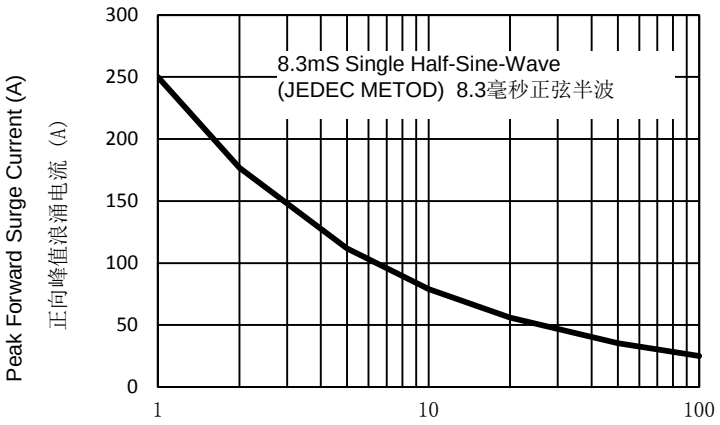


Fig. 3 - Typical Reverse Characteristics

图3 典型的反向特性

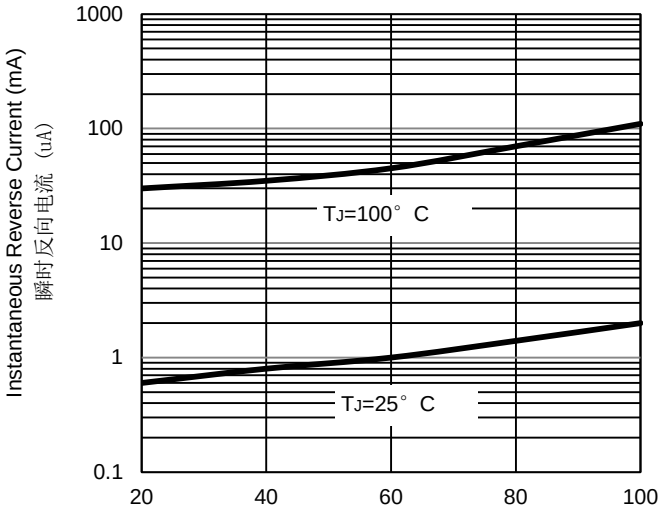


Fig. 4 - Typical Forward Characteristics

图4 典型的正向特性

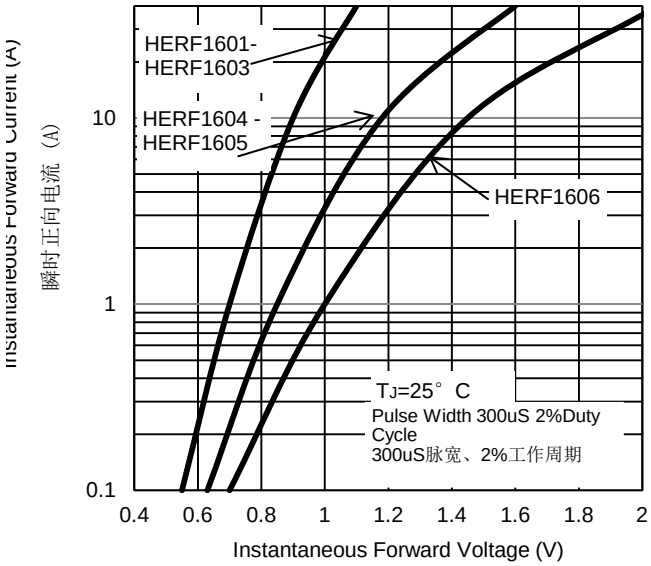
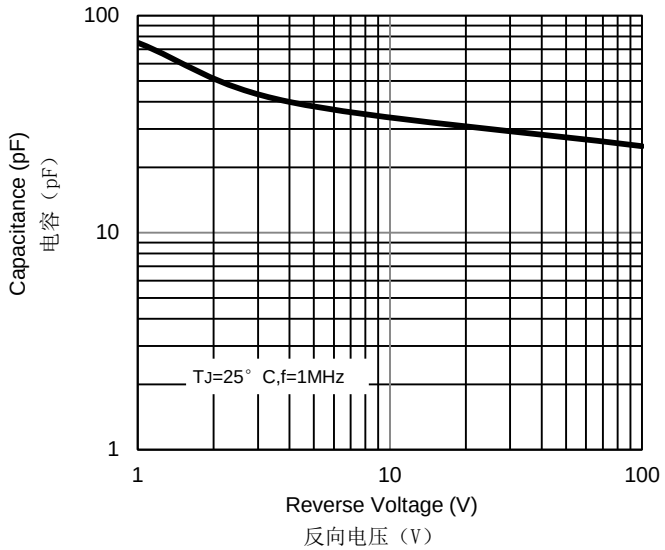


Fig. 5 - Typical Junction Capacitance

图5 典型的结电容



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

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