

MUR860E

Rev.G Oct.-2018

描述 / Descriptions

TO-277 塑封封装 超快恢复二极管。

TO-277 Plastic package Ultrafast Recovery Diode.

特征 / Features

采用硅外延工艺生产的超快恢复二极管，具有较低的反向漏电流和高可靠性。无卤产品。

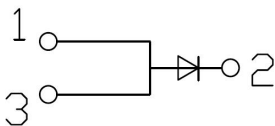
Silicon epitaxial process to produce ultrafast recovery diode with low reverse leakage current and high reliability. HF Product.

用途 / Applications

用于高频、低压、大电流整流二极管，续流二极管，保护二极管。

For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications.

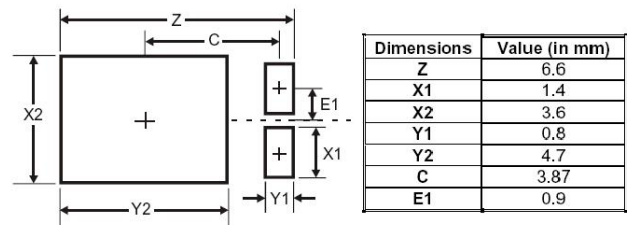
内部等效电路 / Equivalent Circuit



引脚排列 / Pinning



PIN1 : Anode PIN 2 : Cathode PIN 3 : Anode



Suggested Pad layout

放大及印章代码 / h_{FE} Classifications & Marking

见印章说明。See Marking Instructions.

极限参数 / Absolute Maximum Ratings(Ta=25°C)

参数 Parameter	符号 Symbol	数值 Rating	单位 Unit
Peak Repetitive Reverse Voltage	V_{RRM}	600	V
RMS Reverse voltage	V_{RMS}	420	V
Average Rectified Forward Current	I_F	8	A
Non-Repetitive Peak Forward Surge Current	I_{FSM}	125	A
Thermal Resistance Junction to Case	$R_{\theta Jc}$	3.5	°C/W
Junction and Storage Temperature Range	T_J T_{stg}	-55~150	°C

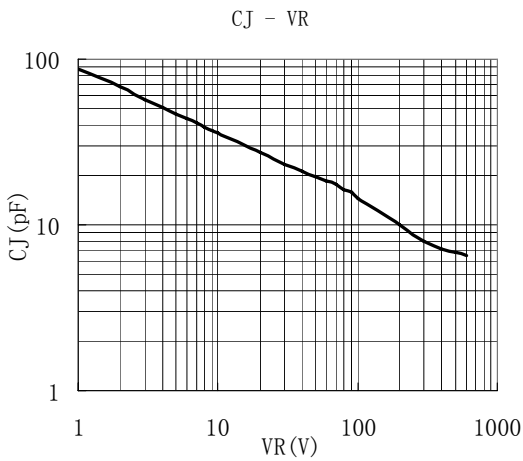
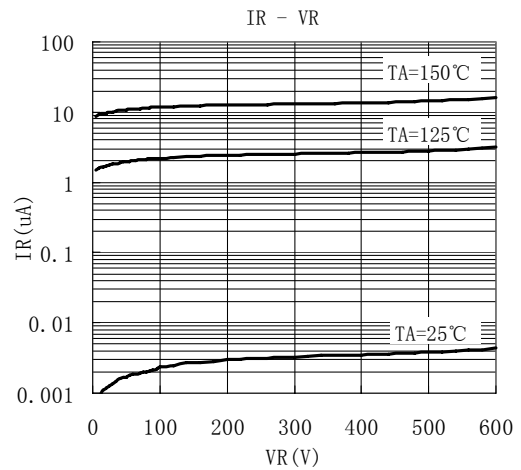
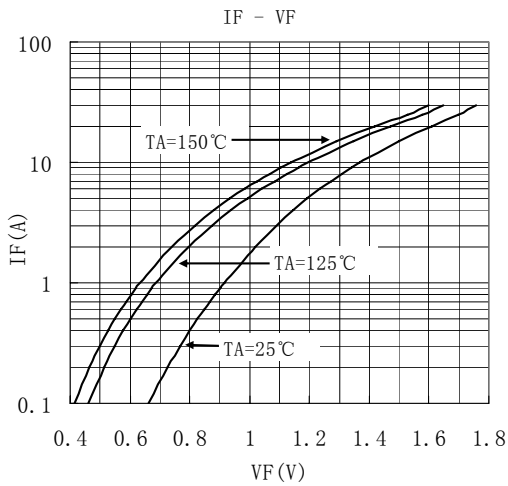
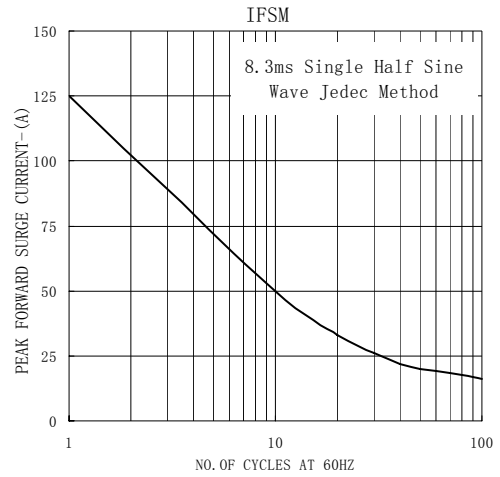
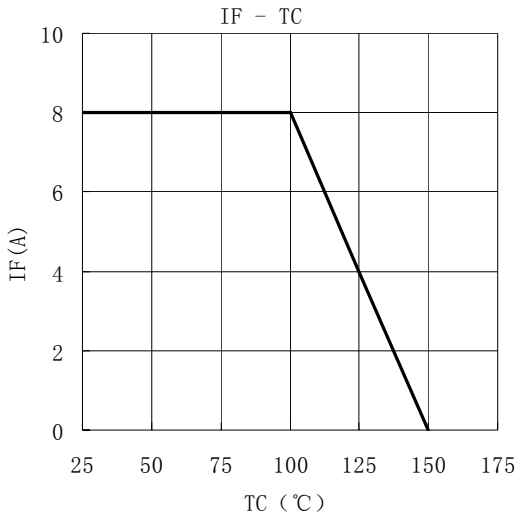
电性能参数 / Electrical Characteristics(Ta=25°C)

参数 Parameter	符号 Symbol	测试条件 Test Conditions	最小值 Min	典型值 Typ	最大值 Max	单位 Unit
Reverse Voltage	V_{BR}	$I_R=100\mu A$	600			V
Forward voltage	V_F	$I_F=8A$ $T_c=25^\circ C$		1.4	1.7	V
		$I_F=16A$ $T_c=25^\circ C$		1.7	2.1	V
		$I_F=8A$ $T_c=125^\circ C$		1.4	1.7	V
Instantaneous Reverse Current	I_R (Note 1)	$V_R=600V$ $T_a=25^\circ C$			5	μA
		$V_R=480V$ $T_a=125^\circ C$			300	μA
		$V_R=600V$ $T_a=125^\circ C$			500	μA
Total Capacitance	C_T	$V_R=200V$			25	pF
Reverse Recovery Time	t_{rr}	$I_F=0.5A$ $I_R=1.0A,$ $I_{RR}=0.25A$			50	ns

注/Notes:

1. 使用极短的测试时间,以尽量减少自热效应。/Short duration pulse test used to minimize self-heating effect.
2. 除非特别注明,数值为一个芯片的参数。/ Unless otherwise noted, values for the parameters of a single chip

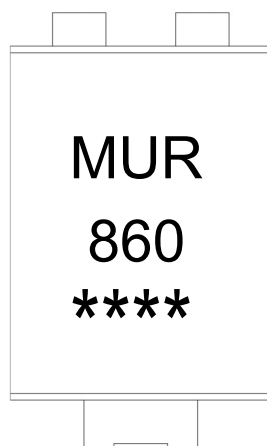
电参数曲线图 / Electrical Characteristic Curve



外形尺寸图 / Package Dimensions



印章说明 / Marking Instructions



说明：

MUR860： 为产品型号

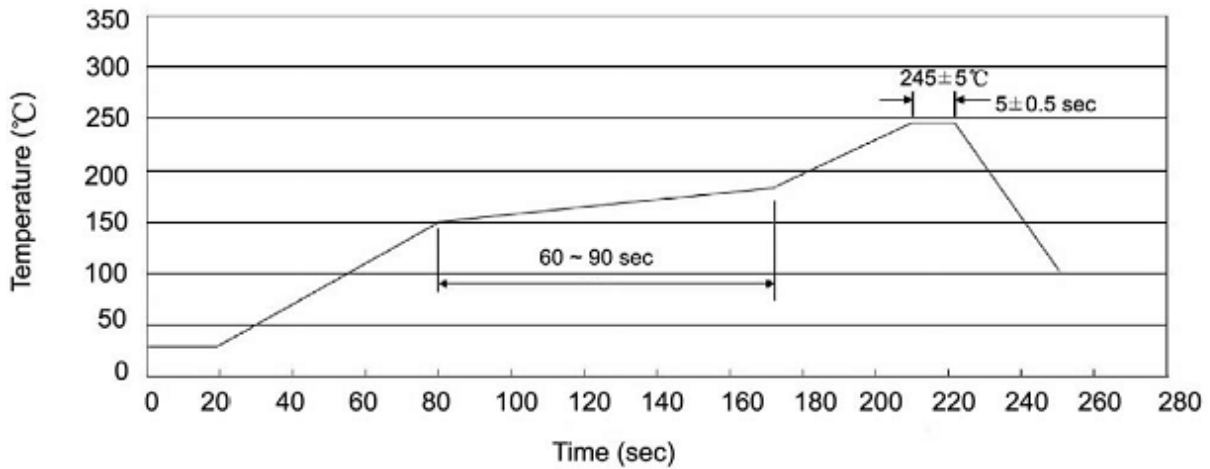
****： 为生产批号代码，随生产批号变化。

Note:

MUR860： Product Type.

****: Lot No. Code, code change with Lot No.

回流焊温度曲线图(无铅) / Temperature Profile for IR Reflow Soldering(Pb-Free)



说明：

- 1、预热温度 150~180°C，时间 60~90sec;
- 2、峰值温度 245±5°C，时间持续为 5±0.5sec;
- 3、焊接制程冷却速度为 2~10°C/sec.

Note:

- 1.Preheating:150~180°C, Time:60~90sec.
- 2.Peak Temp.:245±5°C, Duration:5±0.5sec.
3. Cooling Speed: 2~10°C/sec.

耐焊接热试验条件 / Resistance to Soldering Heat Test Conditions

温度：260±5°C

时间：10±1 sec.

Temp.:260±5°C

Time:10±1 sec

包装规格 / Packaging SPEC.

卷盘包装 / REEL

Package Type 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm ³)		
	Units/Reel 只/卷盘	Reels/Inner Box 卷盘/盒	Units/Inner Box 只/盒	Inner Boxes/Outer Box 盒/箱	Units/Outer Box 只/箱	Reel	Inner Box 盒	Outer Box 箱
TO-277	5,000	3	15,000	6	90,000	13" ×12	360×360×50	380×335×366

使用说明 / Notices