描述 / Descriptions

TO-3P 塑封封装 肖特基二极管。
Schottky Barrier Diode in a TO-3P Plastic Package.

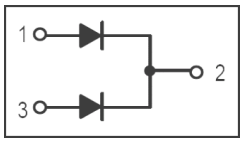
特征 / Features

低正向压降，低功耗，高效率。
Low forward voltage drop,low power losses,High efficiency operation.

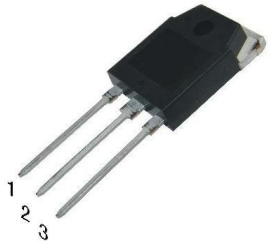
用途 / Applications

用于高频逆变器，开关电源，续流二极管，OR-ing 二极管，DC-DC 转换器和电池反向保护。
For use in high frequency inverters, switching power supplies, freewheeling diodes, OR-ing diode, dc-to-dc converters and reverse battery protection.

内部等效电路 / Equivalent Circuit



引脚排列 / Pinning



PIN1：Anode　　PIN 2：Cathode　PIN 3：Anode

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℃)

参数 Parameter	符号 Symbol	数值 Rating	单位 Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RM} V_{RSM} V_{DC}	100	V
RMS Voltage	V_{RMS}	70	V
Average Rectified Forward Current	$I_{F(AV)}$	2×15	A
Non Repetitive Peak Surge Current	I_{FSM}	200	A
Thermal Resistance Junction to Case	$R_{\theta Jc}$	1.4	℃/W
Junction and Storage Temperature Range	T_j T_{stg}	-40～+150	℃

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

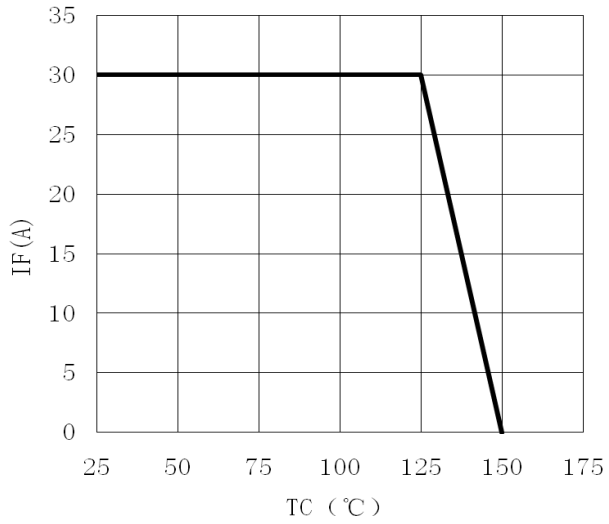
参数 Parameter	符号 Symbol	测试条件 Test Conditions	最小值 Min	典型值 Typ	最大值 Max	单位 Unit
Breakdown Voltage	V_{BR}	I_R=1mA(Ta=25℃)	100			V
Forward Voltage	V_F	I_F =7.5A(Ta=25℃)		0.57	0.65	V
		I_F =7.5A(Ta=125℃)		0.52	0.60	V
		I_F =15A(Ta=25℃)		0.73	0.80	V
		I_F =15A(Ta=125℃)		0.62	0.68	V
Instantaneous Reverse Current	I_R（Note 1）	V_R=100V(Ta=25℃)			150	μA
		V_R=100V(Ta=125℃)		13	25	mA

注/Notes：

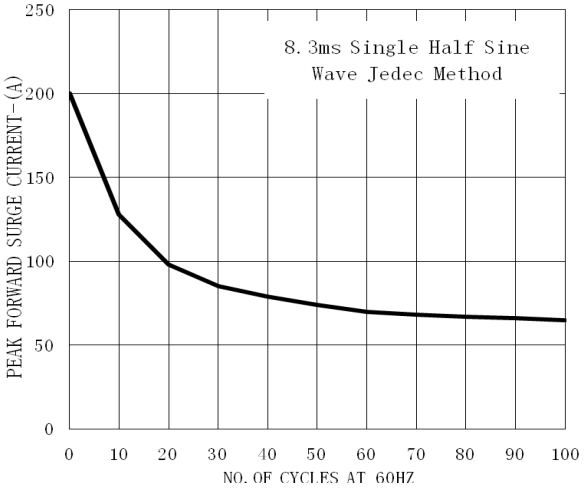
1. 使用极短的测试时间 ,以尽量减少自热效应。/Short duration pulse test used to minimize self-heating effect.
2. 除非特别注明，数值为一个芯片的参数。/ Unless otherwise noted, values for the parameters of a single chip.

电参数曲线图 / Electrical Characteristic Curve

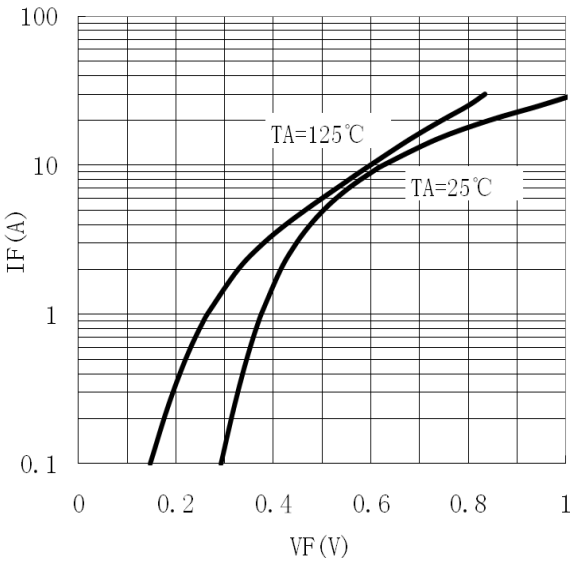
IF - TC



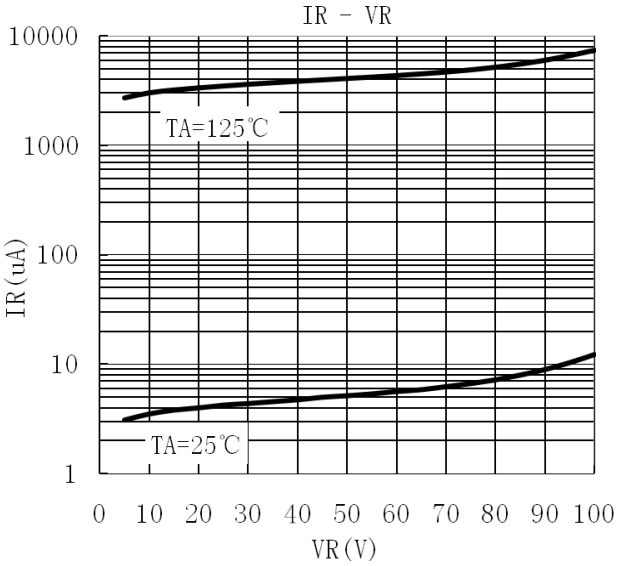
IFSM



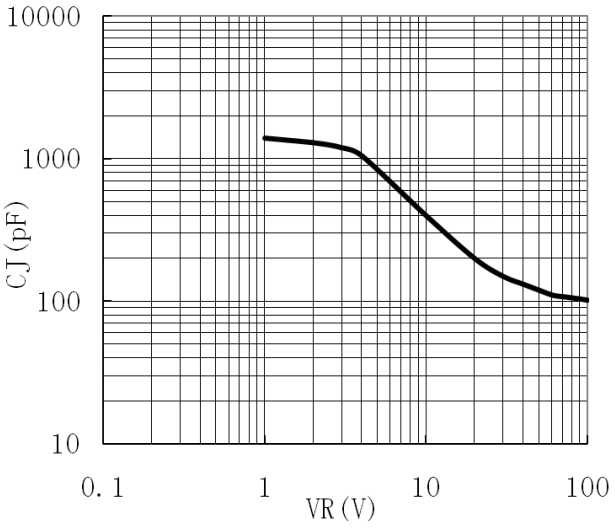
IF - VF



IR - VR



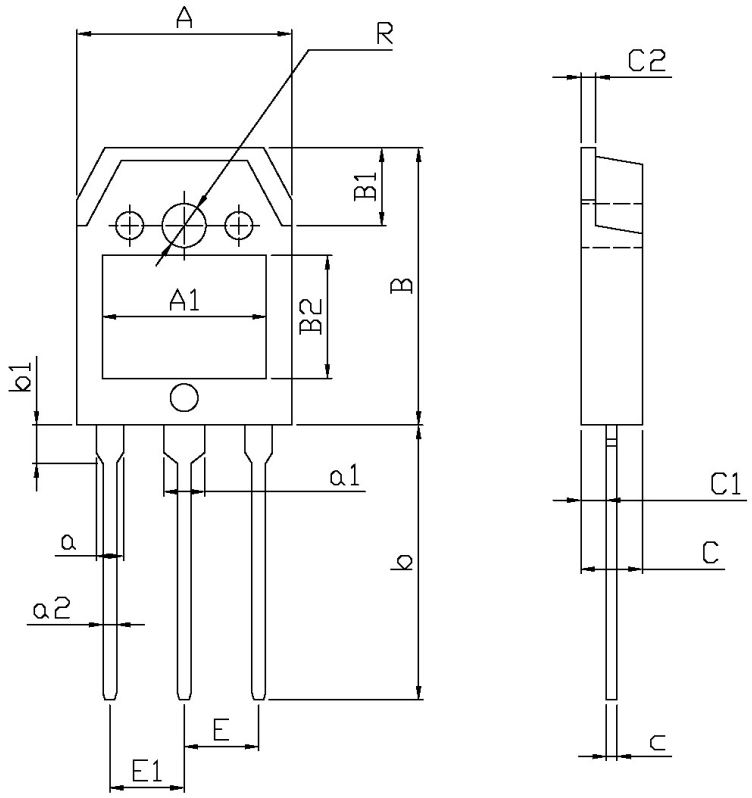
CJ - VR

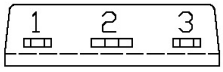


外形尺寸图 / Package Dimensions

TO-3P

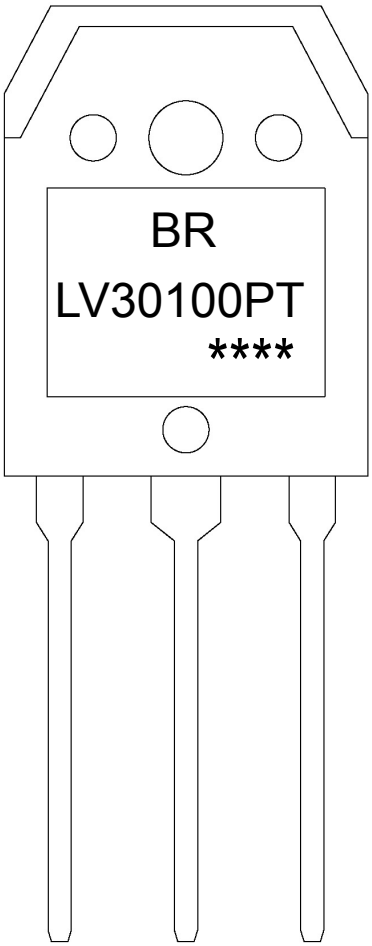
单位：mm





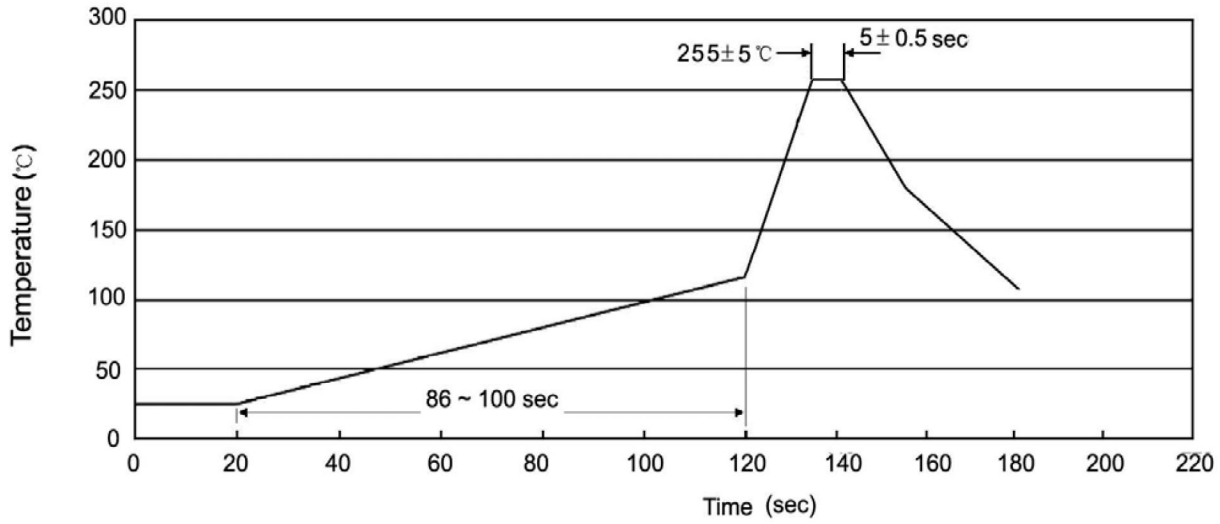
Symbol	Dimensions In Millimeters		Symbol	Dimensions In Millimeters	
	Min	Max		Min	Max
A	15.4	16.0	a2	0.8	1.2
R	3.1	3.5	E	5.45	
B	19.8	20.8	E1	5.45	
B1	5.5	5.9	C	4.3	4.7
B2	9.0		C1	1.2	1.6
A1	12.0		C2	1.4	1.6
b	19.6	20.6	c	0.5	0.7
b1	3.0	3.4			
a	1.8	2.2			
a1	2.8	3.2			

印章说明 / Marking Instructions



说明：	
BR：	为公司代码
LV30100PT：	为产品型号
****：	为生产批号代码，随生产批号变化。
Note:	
BR:	Company Code.
LV30100PT:	Product Type.
****:	Lot No. Code, code change with Lot No.

波峰焊温度曲线图(无铅) / Temperature Profile for Dip Soldering(Pb-Free)



说明：

1、预热温度 25～150℃，时间 60～90sec;

2、峰值温度 255±5℃，时间持续为 5±0.5sec;

3、焊接制程冷却速度为 2～10℃/sec.

Note:

1.Preheating:25~150℃, Time:60~90sec.

2.Peak Temp.:255±5℃, Duration:5±0.5sec.

3. Cooling Speed: 2~10℃/sec.

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

温度：270±5℃　　时间：10±1 sec.　　Temp.:270±5℃　　Time:10±1 sec

包装规格 / Packaging SPEC.

套管包装 / TUBE

Package Type 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm^3)		
	Units/Tube 只/套管	Tubes/Inner Box 套管/盒	Units/Inner Box 只/盒	Inner Boxes/Outer Box 盒/箱	Units/Outer Box 只/箱	Tube 套管	Inner Box 盒	Outer Box 箱
TO-3P	30	15	450	5	2250	497.5×46×8	555×164×50	575×290×180

使用说明 / Notices