SOT-363

200mA,30V肖特基二极管阵列
200mA,30V Schottky Barrier Diode Array

产品特性总结Product Summary	
I_F	200mA
V_{RRM}	30V
I_{FSM}	600mA

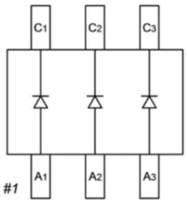
特征 Features

- 高开关速度Fast Switching Speed
- 低正向压降Low Forward Voltage Drop
- 无卤、RoHS认证Halogen-free、RoHS Compliant
- 表贴型封装Surface Mount Package

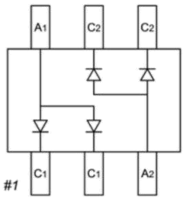
应用 Applications

- 电压钳位Voltage Clamping
- 反极性保护Reverse Polarity Protection
- 高速开关High Speed Switching

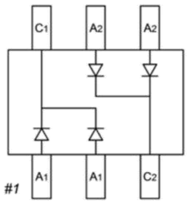
脚位定义Pin Definition



BAT54T



BAT54AD



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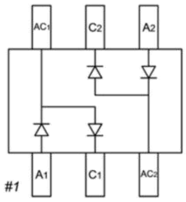

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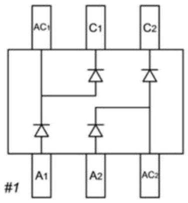


BAT54BR

极限值和温度特性(TA = 25℃ 除非另有规定)

Maximum Ratings & Thermal Characteristics (Ratings at 25℃ ambient temperature unless otherwise specified.)

参数 Parameters	符号 Symbol	数值 Value					单位 Unit
		BAT54T	BAT54AD	BAT54CD	BAT54SD	BAT54BR	
印字代码Marking Code		KLA	KL6	KL7	KL8	KLB	
重复峰值反向电压 Repetitive Peak Reverse Voltage	V_{RRM}	30					V
重复峰值正向电流 Repetitive Peak Forward Current	I_{FRM}	300					mA
正向电流Forward Current	I_F	200					mA
峰值不重复正向浪涌电流 Non-Repetitive Peak Forward Surge Current @ t<1.0s	I_{FSM}	600					mA
功耗Power Dissipation	P_D	200					mW
结环热阻Junction-to-Ambient Thermal Resistance	$R_{\Theta JA}$	625					℃/W
结温和存储温度Junction and Storage Temperature	T_J 、 T_{STG}	-65~+150					℃

电特性 (TA = 25℃ 除非另有规定)

Electrical Characteristics (Ratings at 25℃ ambient temperature unless otherwise specified).

参数 Parameters	符号 Symbol	测试条件 Test Condition	最小值 Min	典型值 Typ	最大值 Max	单位Unit
每个二极管的正向电压 Forward Voltage per Diode(Note1)	V_F	I_F = 0.1mA, T_J = 25°C	--	--	0.24	V
		I_F = 1mA, T_J = 25°C	--	--	0.32	
		I_F = 10mA, T_J = 25°C	--	--	0.40	
		I_F = 30mA, T_J = 25°C	--	--	0.50	
		I_F = 100mA, T_J = 25°C	--	--	1.00	
反向电压 Reverse Voltage	V_R	I_R=100µA, T_J = 25°C	30	--	--	V

反向漏电流Reverse Current @Rated V_R per Diode(Note2)	I_R	V_R=25V, T_J = 25°C	--	--	2	μA
总电容Total Capacitance	C_T	1MHz,V_R=1V	0.5	--	10	pF
反向恢复时间 Reverse Recovery Time	trr	I_F=I_R=10mA,R_L=100 Ω ,I_{RR}=1mA	--	--	5	nS

***Notes :**

1. Pulse test with PW=0.3 ms.
2. Pulse test with PW=30 ms.

典型特性曲线 Typical characteristics

Fig.1 Typical Forward Characteristics

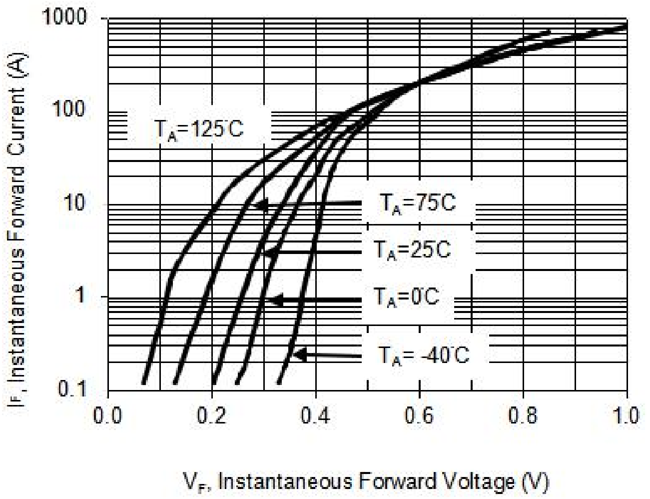


Fig. 2 Typical Reverse Characteristics

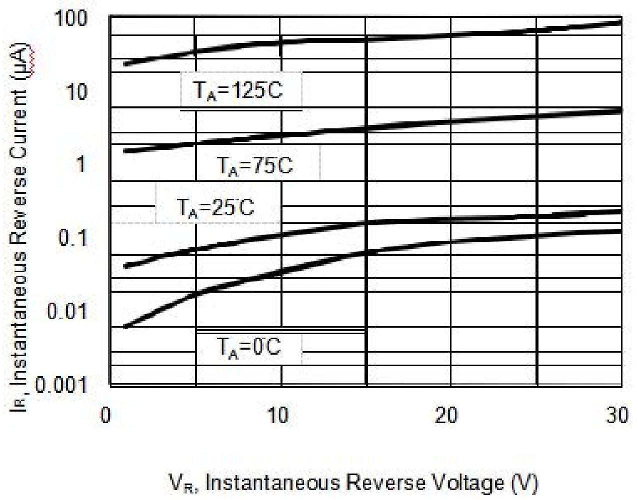


Fig.3 Capacitance Between Terminals Characteristics

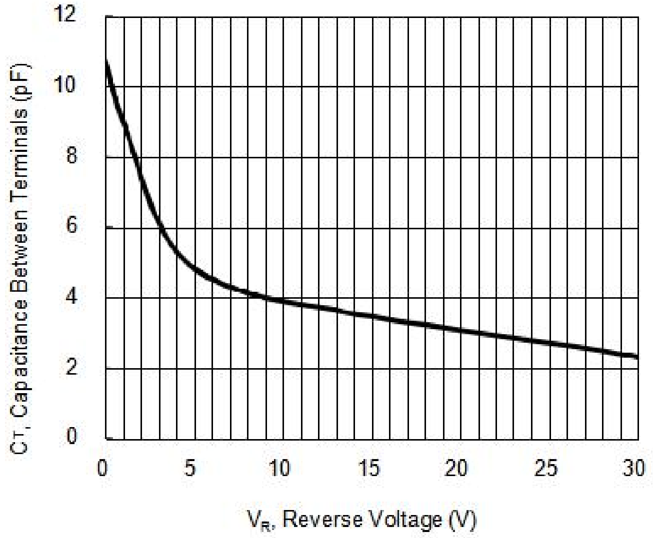
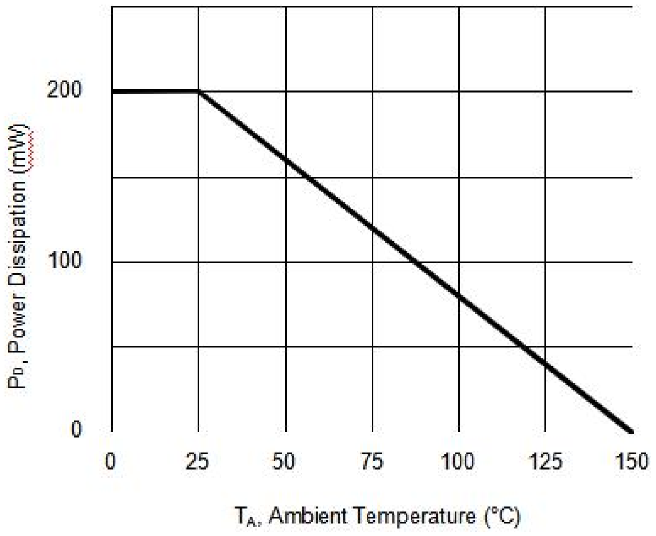
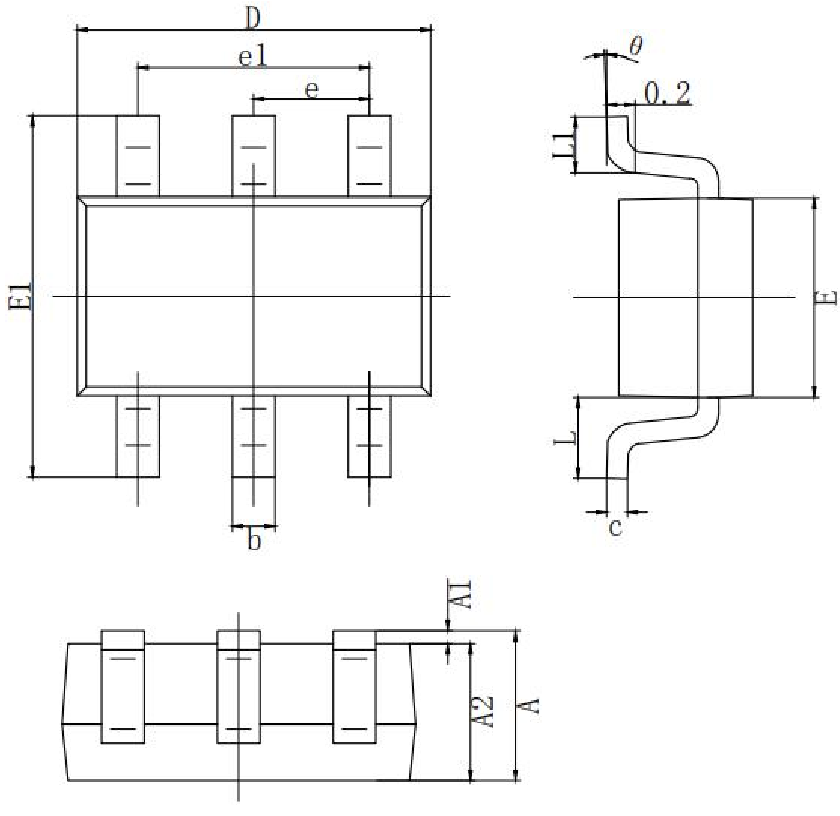
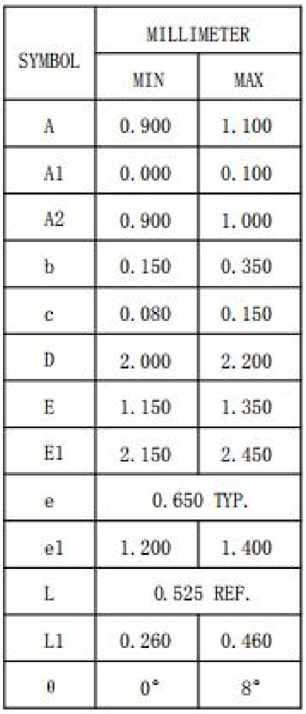


Fig.4 Power Derating Curve



封装外形图 SOT-363 Package Outline Dimensions

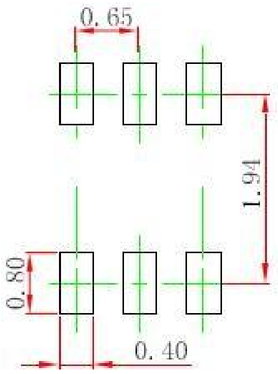




SYMBOL	MILLIMETER	
	MIN	MAX
A	0.900	1.100
A1	0.000	0.100
A2	0.900	1.000
b	0.150	0.350
c	0.080	0.150
D	2.000	2.200
E	1.150	1.350
E1	2.150	2.450
e	0.650 TYP.	
e1	1.200	1.400
L	0.525 REF.	
L1	0.260	0.460
θ	0°	8°

焊盘设计参考Precautions: PCB Design

Recommended land dimensions for SOT-363. Electrode patterns for PCBs



Note:
1.Controlling dimension:in millimeters.
2.General tolerance:± 0.05mm.
3.The pad layout is for reference purposes only.