

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

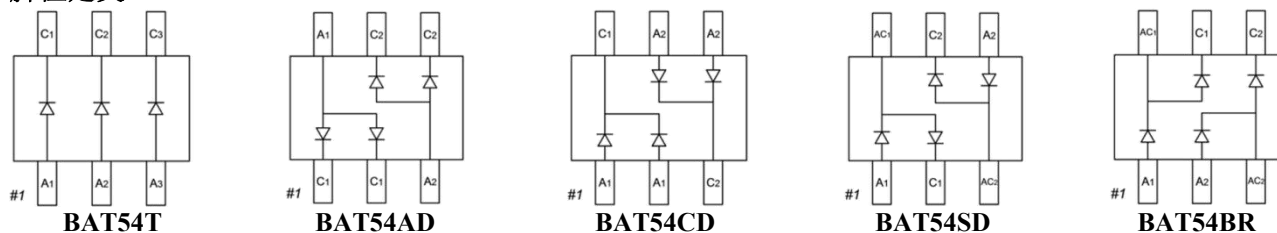
特征 Features

- 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



极限值和温度特性(T_A = 25°C 除非另有规定)

Maximum Ratings & Thermal Characteristics (Ratings at 25°C 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 _{θJA}	625					°C/W
结温和存储温度Junction and Storage Temperature	T _J 、T _{STG}	-65~+150					°C

电特性 (T_A = 25°C 除非另有规定)

Electrical Characteristics (Ratings at 25°C 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	$V_R=25V, T_J = 25^\circ C$	--	--	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	t_{rr}	$I_F=I_R=10mA, R_L=100\Omega, I_{RR}=1mA$	--	--	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

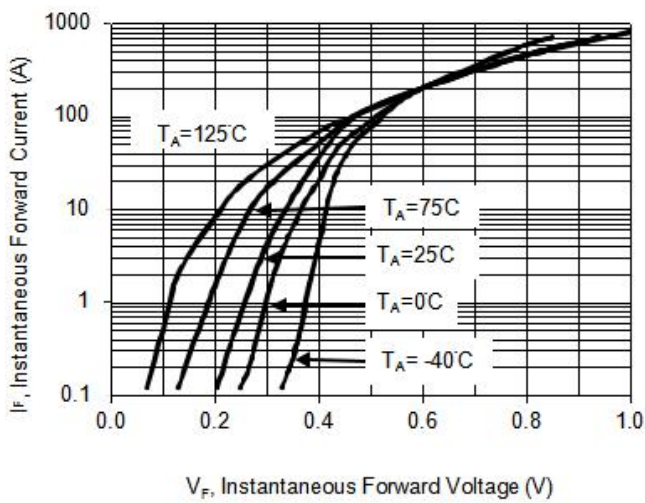


Fig.3 Capacitance Between Terminals Characteristics

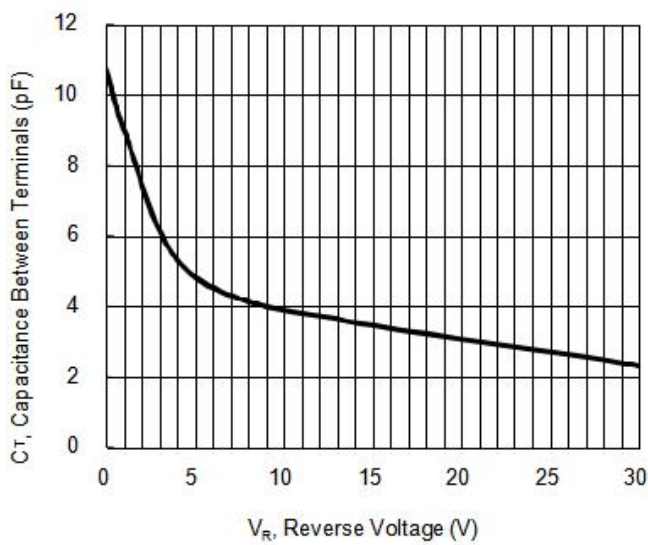


Fig. 2 Typical Reverse Characteristics

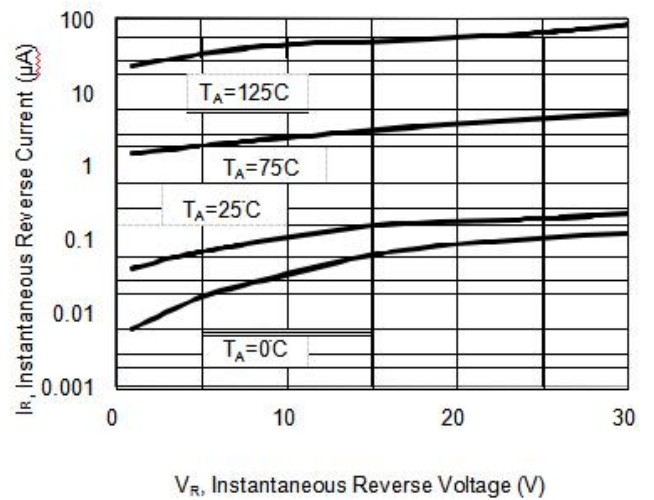
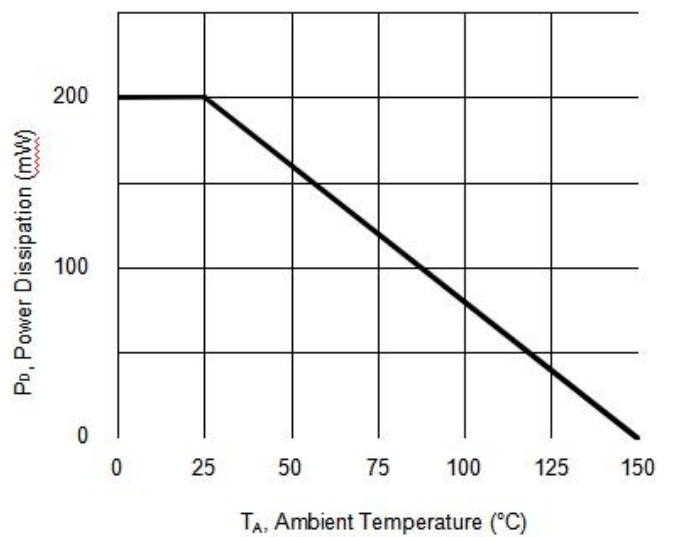
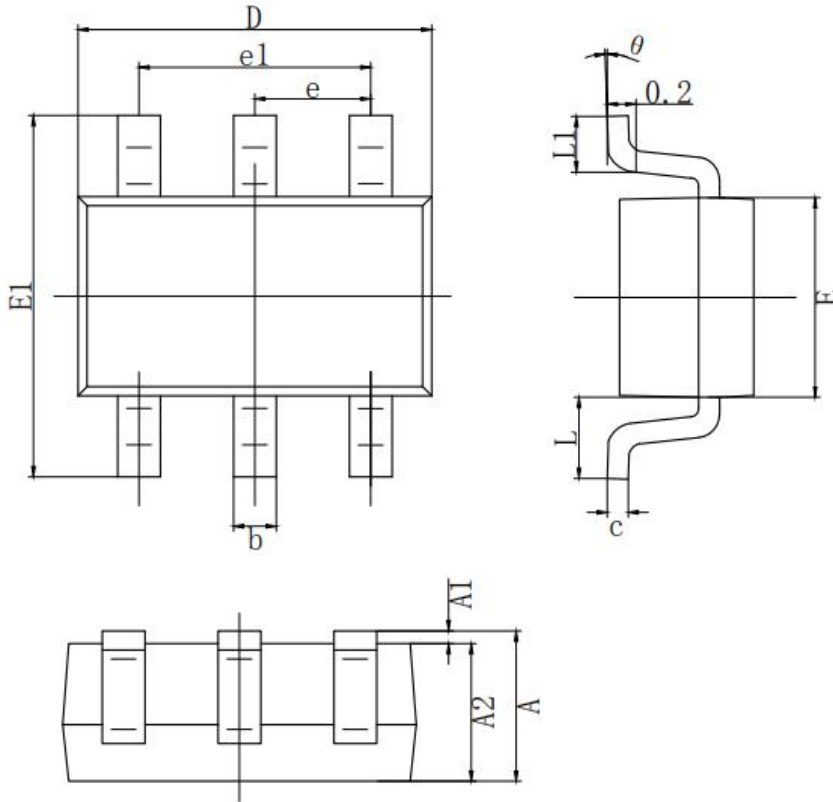


Fig.4 Power Derating Curve



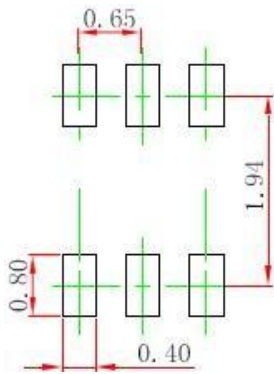
封装外形图 SOT-363 Package Outline Dimensions



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: ± 0.05 mm.
3. The pad layout is for reference purposes only.