

印字代码Marking Code: KAC

300mA, 75V开关二极管阵列 300mA, 75V Switching Diode Array

特征 Features

- 高开关速度Fast Switching Speed
- 常规开关应用For General Purpose Switching Applications
- 一个封装内集成一颗BAV70和一颗BAW56 One BAV70 Circuit and One BAW56 Circuit In One Package
- 超小型表贴封装Ultra-Small Surface Mount Package

机械数据 Mechanical Data

- 封装类型:SOT-363 Package Type: SOT-363
- 环氧树脂UL易燃等级Epoxy UL: 94V-0
- 安装位置: 任意Mounting Position: Any

极限值和温度特性(TA = 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
重复峰值反向电压Repetitive Peak Reverse Voltage	V_{RRM}	75	V
工作峰值反向电压Working Peak Reverse Voltage	V_{RWM}		
直流阻断电压DC Blocking Voltage	V_R		
正向连续电流Forward Continuous Current	I_{FM}	300	mA
平均整流输出电流Average Rectified Output Current	I_O	150	mA
峰值不重复正向浪涌电流 Non-Repetitive Peak Forward Surge Current @ t=8.3ms	I_{FSM}	2.0	A
功耗Power Dissipation	P_D	200	mW
结环热阻Junction-to-Ambient Thermal Resistance	$R_{\theta JA}$	625	°C/W
结温和存储温度Junction and Storage Temperature	T_J 、 T_{STG}	-55~+150	°C

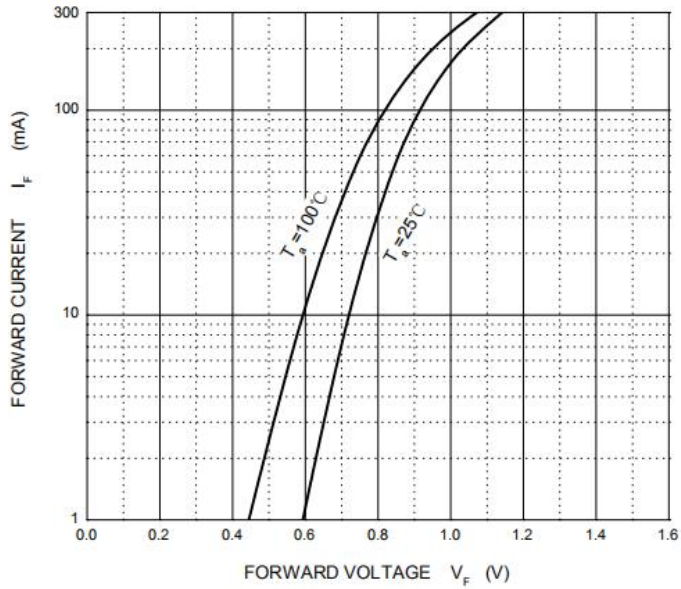
电特性 (TA = 25°C 除非另有规定)

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

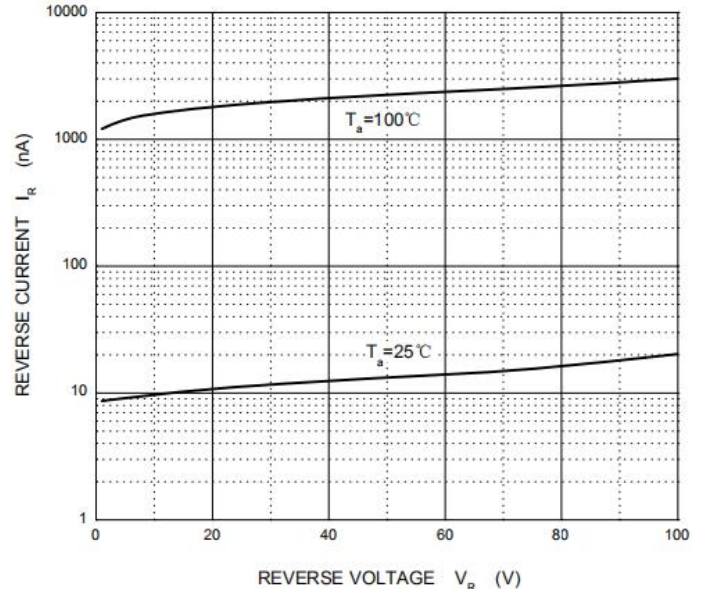
参数 Parameters	符号 Symbol	测试条件 Test Condition	最小值 Min	典型值 Typ	最大值 Max	单位 Unit
正向电压Forward Voltage	V_F	$I_F=1mA$	--	--	0.715	V
		$I_F=10mA$	--	--	0.855	
		$I_F=50mA$	--	--	1	
		$I_F=150mA$	--	--	1.25	
反向电压Reverse Voltage	V_R	$I_R=2.5\mu A$	75	--	--	V
反向漏电流Reverse Current	I_R	$V_R=75V$	--	--	2.5	μA
		$V_R=20V$	--	--	25	nA
总电容Total Capacitance	C_T	1MHz, $V_R=0V$	--	--	2	pF
反向恢复时间 Reverse Recovery Time	t_{rr}	$I_F=I_R=10mA$, $I_{tr}=0.1 \times I_R$, $R_L=100\Omega$	--	--	4	nS

典型特性曲线 Typical Characteristics Curve

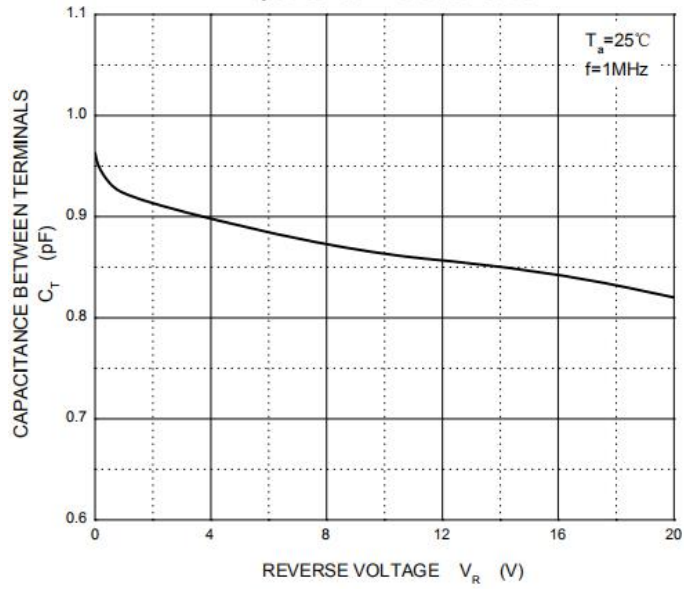
Forward Characteristics



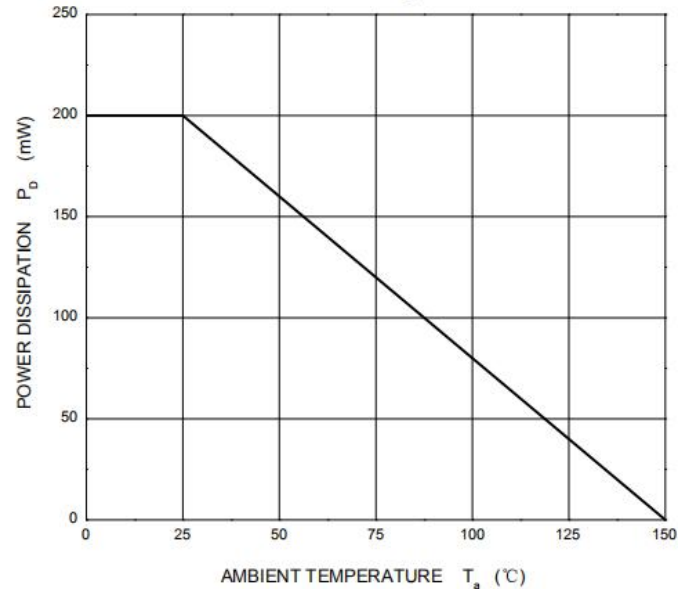
Reverse Characteristics



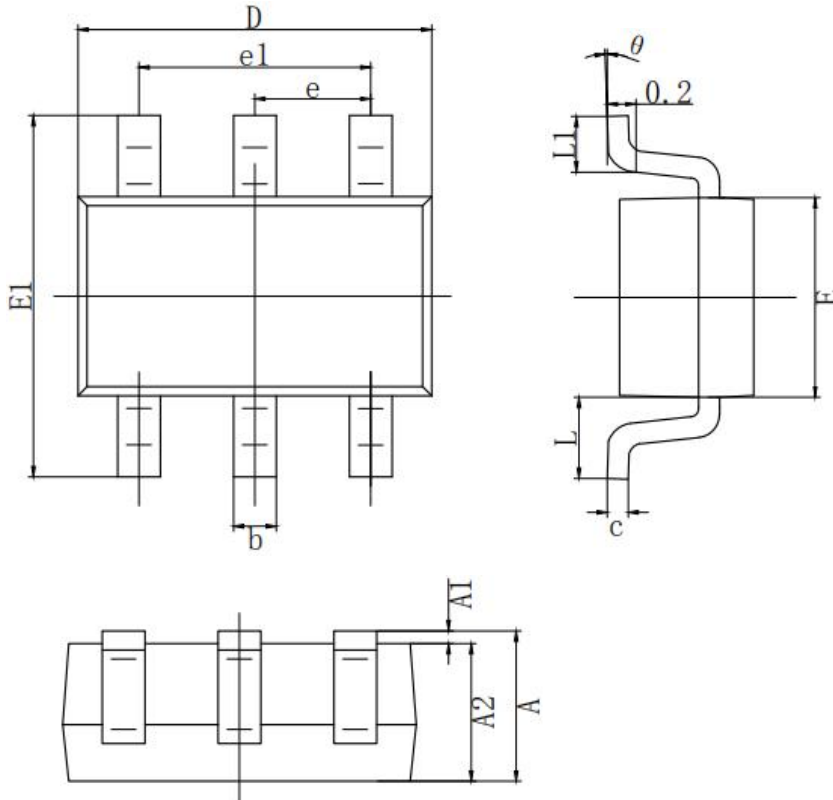
Capacitance Characteristics



Power Derating Curve



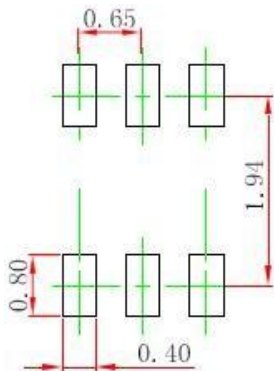
封装外形图 SOT-363 Package Outline Dimensions



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
theta	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: $\pm 0.05\text{mm}$.
3. The pad layout is for reference purposes only.