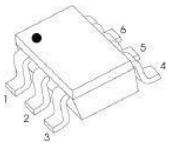
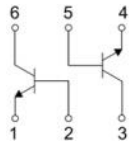
SOT-363



Marking：1B



1. Emitter1
2. Base1
3. Collector2
4. Emitter2
5. Base2
6. Collector1

SOT-363 贴片塑封三极管
SOT-363 Plastic-Encapsulate Transistors

特征 Features

- 一个封装体内集成两个晶体管; Two Transistors in One Package
- 最大功率耗散 380mW; Power Dissipation of 380mW
- 高稳定性和可靠性。High Stability and High Reliability

机械数据 Mechanical Data

- 封装: SOT-363 封装SOT-363 Small Outline Plastic Package
- 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℃ 除非另有规定)

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

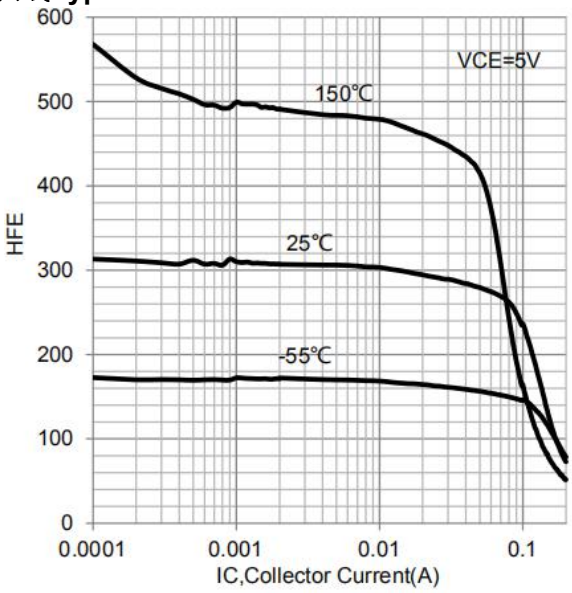
参数 Parameters	符号Symbol	数值 Value	单位Unit
Collector-Base Voltage	V_{CBO}	80	V
Collector-Emitter Voltage	V_{CEO}	65	V
Emitter -Base Voltage	V_{EBO}	6	V
Collector Current-Continuous	I_C	100	mA
Collector Power Dissipation	P_C	380	mW
Junction Temperature	T_j	150	℃
Storage Temperature	Tstg	-55-+150	℃
Thermal resistance From junction to ambient	$R_{\theta JA}$	328	℃/W

电特性 (TA = 25℃ 除非另有规定)

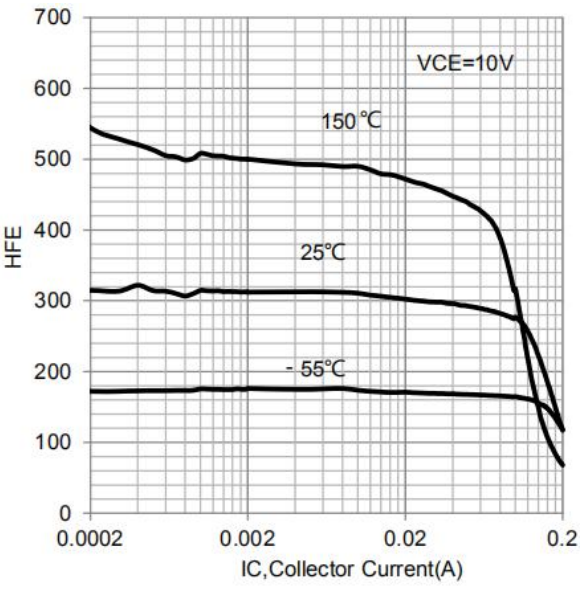
Electrical Characteristics (Ratings at 25℃ ambient temperature unless otherwise specified).

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	I_C=10μA,I_E=0	80			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	I_C=10mA,I_B=0	65			V
Collector-emitter breakdown voltage	$V_{(BR)CES}$	I_C=10μA,V_{EB}=0	80			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	I_E=1μA,I_C=0	6			V
Collector cut-off current	I_{CBO}	V_{CB}=30V,I_E=0			15	nA
DC current gain	h_{FE}	V_{CE}=5V,I_C=2mA	200		450	
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C=10mA,I_B=0.5mA			0.25	V
		I_C=100mA,I_B=5mA			0.6	V
Base–Emitter Saturation Voltage	$V_{BE(sat)}$	I_C=10mA,I_B=0.5mA		0.7		V
		I_C=100mA,I_B=5mA		0.9		V
Base-emitter voltage	V_{BEON}	V_{CE}=5V,I_C=2mA	0.58		0.7	V
		V_{CE}=5V,I_C=10mA			0.77	V
Output Capacitance	C_{obo}	V_{CB}=10V,f=1MHz, I_E=0			4.5	pF
Current Gain-Bandwidth product	f_T	V_{CE}=5V,I_C=10mA,f=100MHz	100			MHz

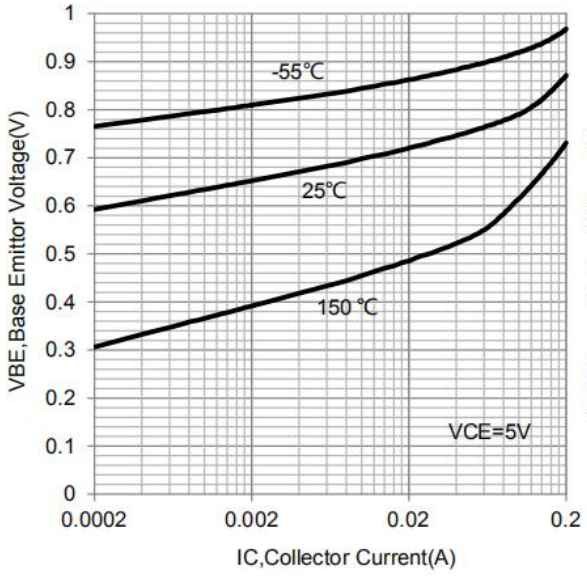
典型特性曲线Typical Characteristics Curve



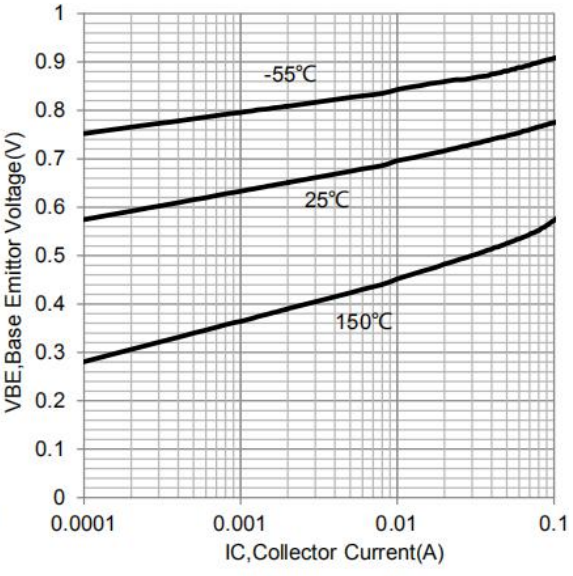
HFE vs. IC



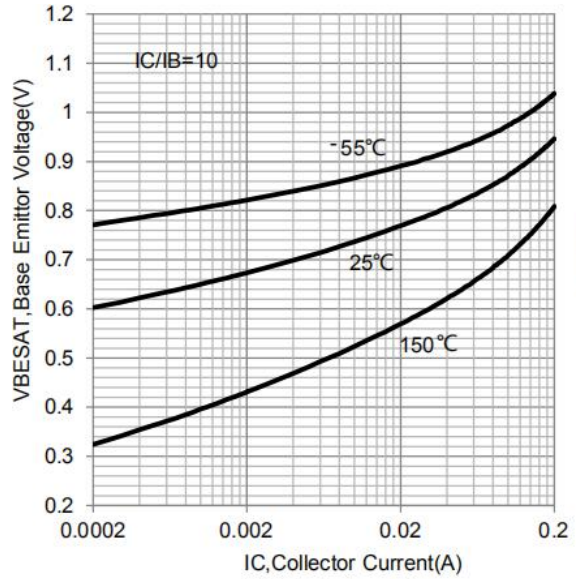
HFE vs. IC (VCE=10V)



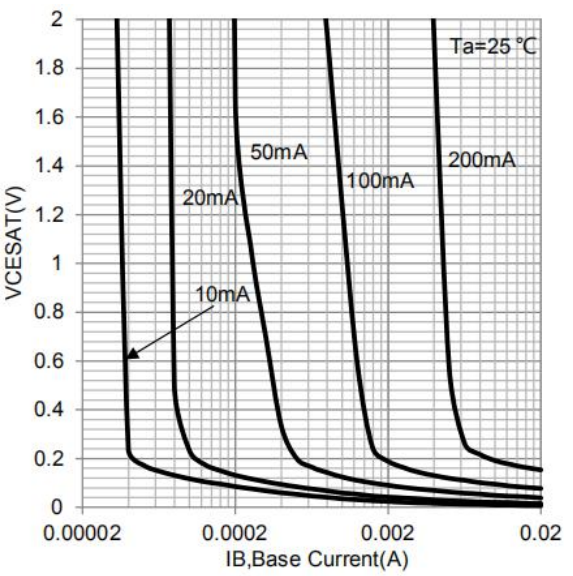
VBE(on) vs. IC



VBE(on) vs. IC

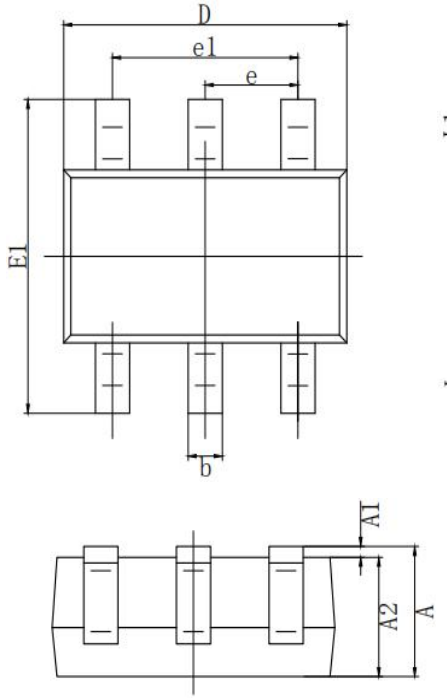


VBESAT vs. IC



VCESAT vs. IB

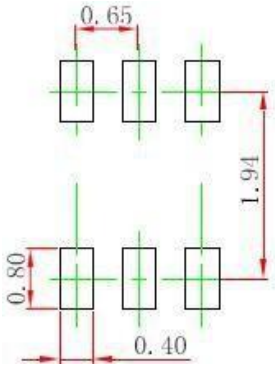
SOT-363 PACKAGE OUTLINE Plastic surface mounted package



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.