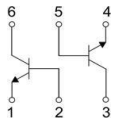
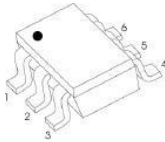


SOT-363



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

- 与 MMDT3904 配对; Complementary to MMDT3904
- 最大功率耗散 200mW; Power Dissipation of 200mW
- 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}	-40	V
Collector-Emitter Voltage	V_{CEO}	-40	V
Emitter -Base Voltage	V_{EBO}	-5	V
Collector Current-Continuous	I_C	-200	mA
Collector Power Dissipation	P_C	200	mW
Junction Temperature	T_j	150	℃
Storage Temperature	T_{stg}	-55-+150	℃
Thermal resistance From junction to ambient	$R_{\theta JA}$	625	℃/W

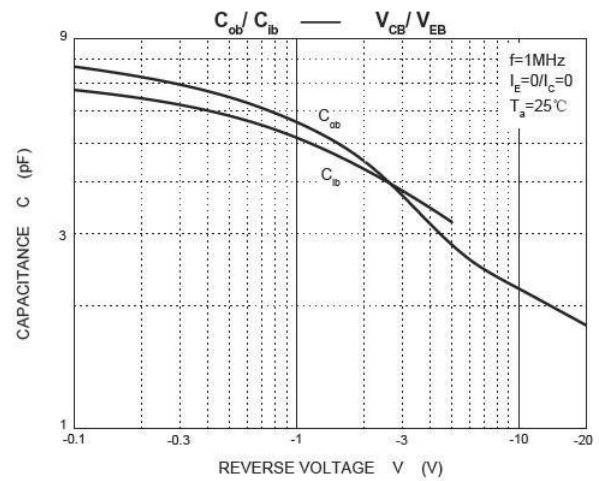
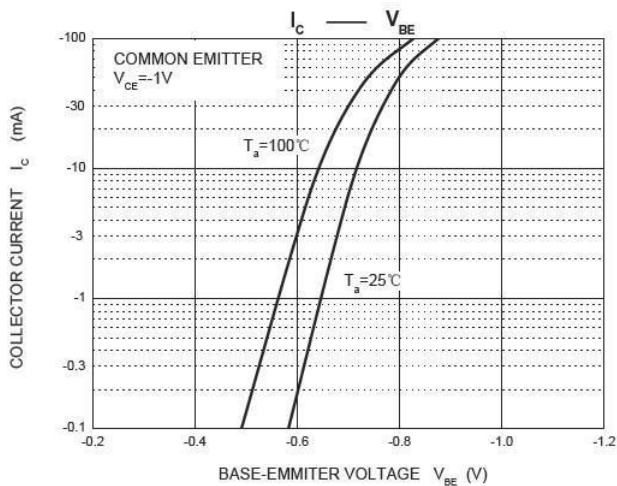
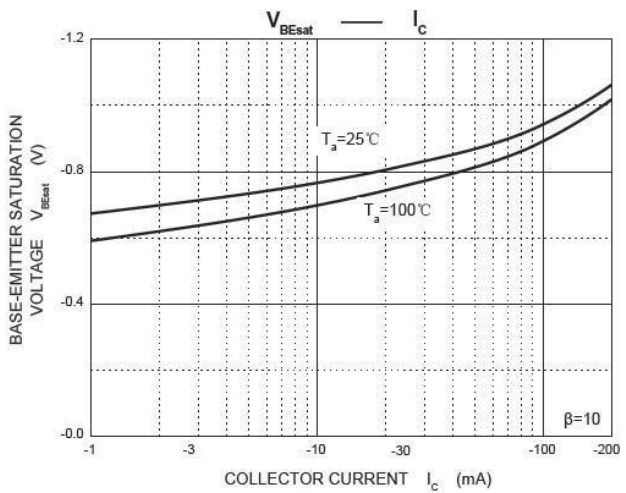
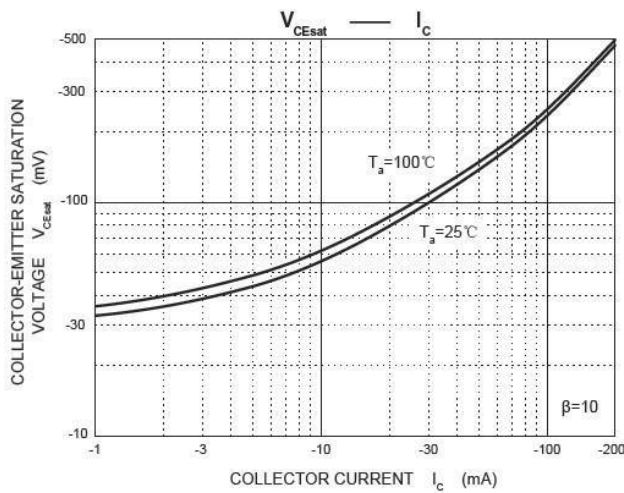
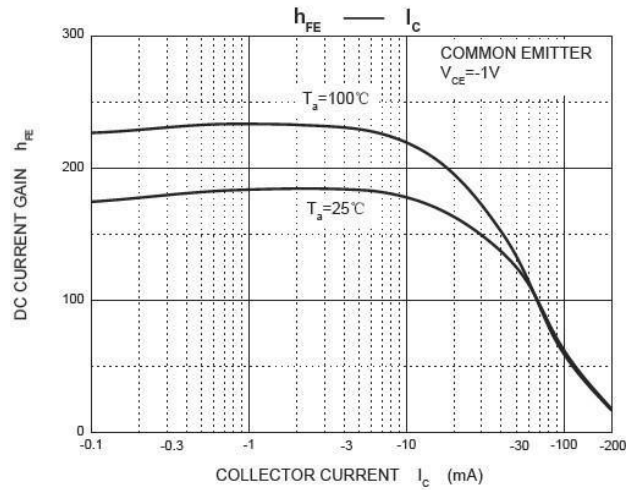
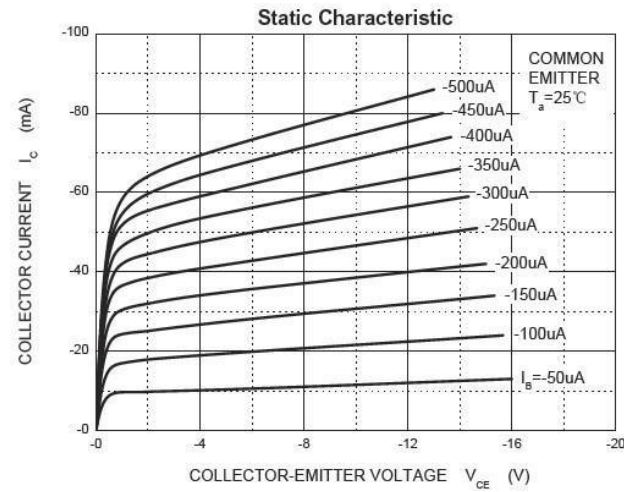
电特性 (TA = 25℃ 除非另有规定)

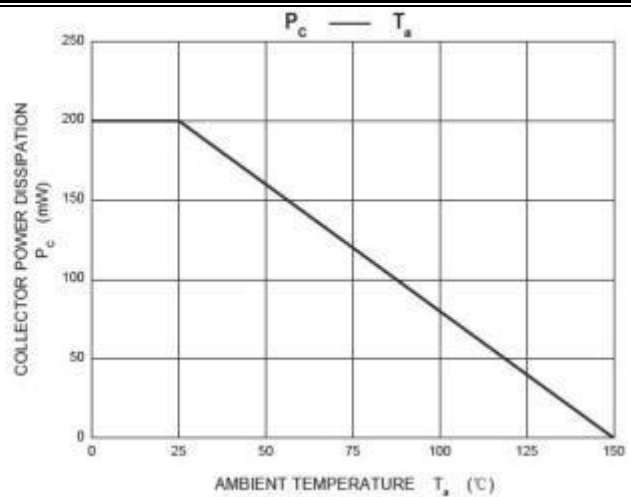
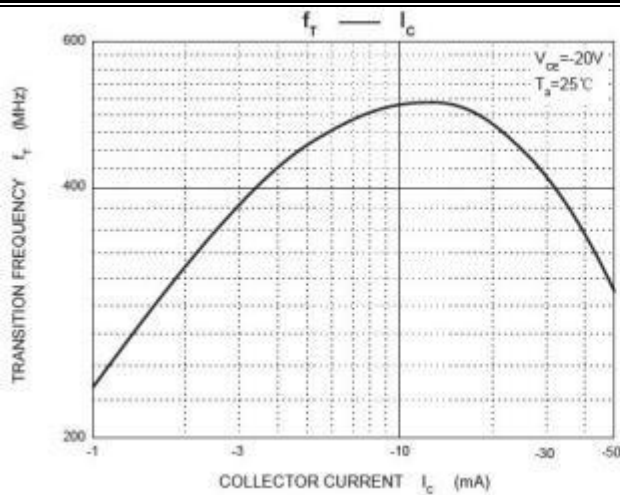
Electrical Characteristics (Ratings at 25℃ ambient temperature unless otherwise specified.)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=10\mu A, I_E=0$	-40			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=1mA, I_B=0$	-40			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=10\mu A, I_C=0$	-5			V
Emitter cut-off current	I_{EBO}	$V_{EB}=-5V, I_C=0$			-50	nA
Collector cut-off current	I_{CEX}	$V_{CE}=-30V, V_{BE(off)}=-3V$			-50	nA
DC current gain	$h_{FE(1)}$	$V_{CE}=-1V, I_C=-0.1mA$	60			
	$h_{FE(2)}$	$V_{CE}=-1V, I_C=-1mA$	80			
	$h_{FE(3)}$	$V_{CE}=-1V, I_C=-10mA$	100		300	
	$h_{FE(4)}$	$V_{CE}=-1V, I_C=-50mA$	60			
	$h_{FE(5)}$	$V_{CE}=-1V, I_C=-100mA$	30			
Collector-emitter saturation voltage	$V_{CE(sat)1}$	$I_C=-10mA, I_B=-1mA$			-0.25	V
	$V_{CE(sat)2}$	$I_C=-50mA, I_B=-5mA$			-0.4	V
Base-emitter saturation voltage	$V_{BE(sat)1}$	$I_C=-10mA, I_B=-1mA$	-0.65		-0.85	V
	$V_{BE(sat)2}$	$I_C=-50mA, I_B=-5mA$			-0.95	V
Transition frequency	f_T	$V_{CE}=-20V, I_C=-10mA, f=100MHz$	250			MHz
Delay time	t_d	$V_{CC}=3V, V_{BE(off)}=-0.5V$			35	nS
Rise time	t_r	$I_C=10mA, I_{B1}=-I_{B2}=1mA$			35	nS
Storage time	t_s	$V_{CC}=3V, I_C=10mA$			225	nS
Fall time	t_f	$I_{B1}=-I_{B2}=1mA$			75	nS

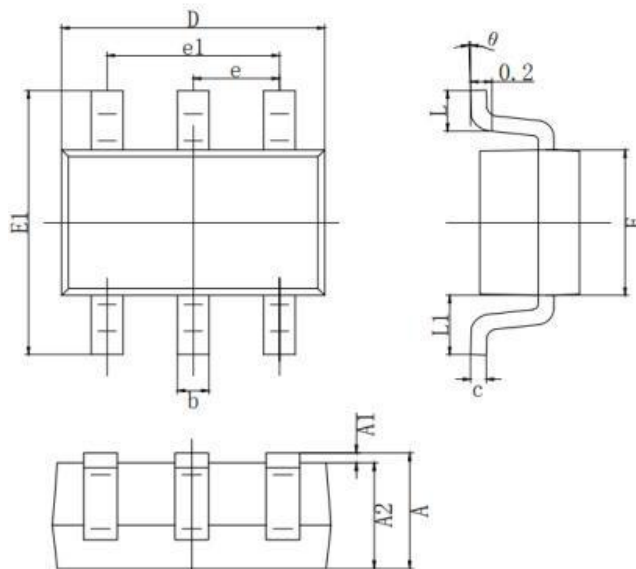


Typical characteristics





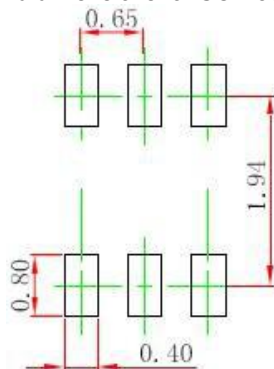
SOT-363 PACKAGE OUTLINE Plastic surface mounted package



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