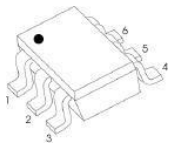
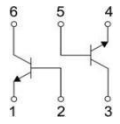
SOT-363



Marking：K6N



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 MMDT3906 配对; Complementary to MMDT3906
- 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
集电极-基极电压Collector-Base Voltage	V_{CBO}	60	V
集电极-发射极电压Collector-Emitter Voltage	V_{CEO}	40	V
发射极-基极电压Emitter -Base Voltage	V_{EBO}	6	V
集电极连续电流Collector Current-Continuous	I_C	200	mA
集电极功耗Collector Power Dissipation	P_C	200	mW
结温Junction Temperature	T_j	150	℃
储存温度Storage Temperature	Tstg	-55-+150	℃
结环热阻Thermal resistance From junction to ambient	$R_{\theta JA}$	625	℃/W

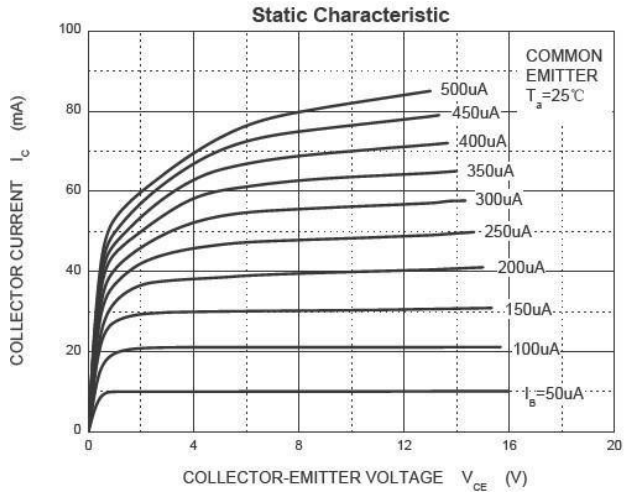
电特性 (TA = 25℃ 除非另有规定)

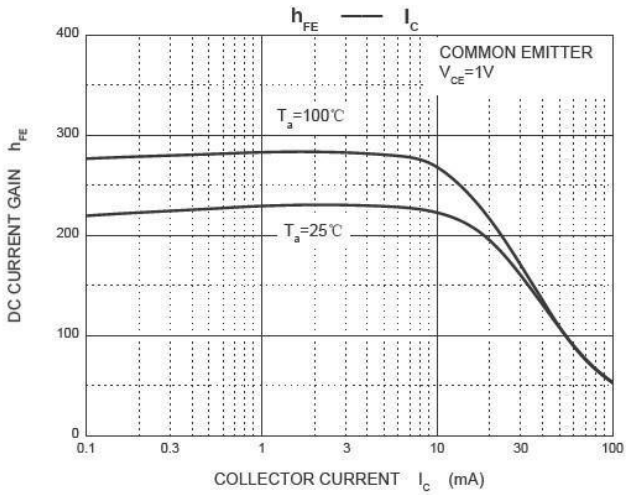
Electrical Characteristics (Ratings at 25℃ ambient temperature unless otherwise specified).

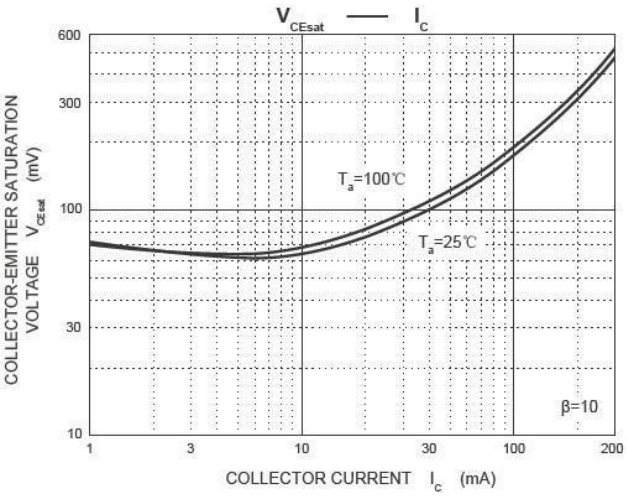
参数Parameter	符号 Symbol	测试条件Test conditions	最小值 Min	典型值 Typ	最大值 Max	单位 Unit
集电极-基极击穿电压 Collector-base breakdown voltage	$V_{(BR)CBO}$	I_C=10μA,I_E=0	60			V
集电极-发射极击穿电压 Collector-emitter breakdown voltage	$V_{(BR)CEO}$	I_C=1mA,I_B=0	40			V
发射极-基极击穿电压 Emitter-base breakdown voltage	$V_{(BR)EBO}$	I_E=10μA,I_C=0	5			V
集电极截止电流 Collector cut-off current	I_{CBO}	V_{CB}=30V,I_E=0			50	nA
发射极截止电流Emitter cut-off current	I_{EBO}	V_{EB}=5V,I_C=0			50	nA
直流电流增益DC current gain	$h_{FE(1)}$	V_{CE}=1V,I_C=0.1mA	40			
	$h_{FE(2)}$	V_{CE}=1V,I_C=1mA	70			
	$h_{FE(3)}$	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			
集电极-发射极饱和电压 Collector-emitter saturation voltage	$V_{CE(sat)1}$	I_C=10mA,I_B=1mA			0.2	V
	$V_{CE(sat)2}$	I_C=50mA,I_B=5mA			0.3	V
基极-发射极饱和电压 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
特征频率Transition frequency	f_T	V_{CE}=20V,I_C=10mA,f=100MHz	300			MHz
延迟时间Delay time	t_d	V_{CC}=3V, $V_{BE(off)}$=-			35	nS

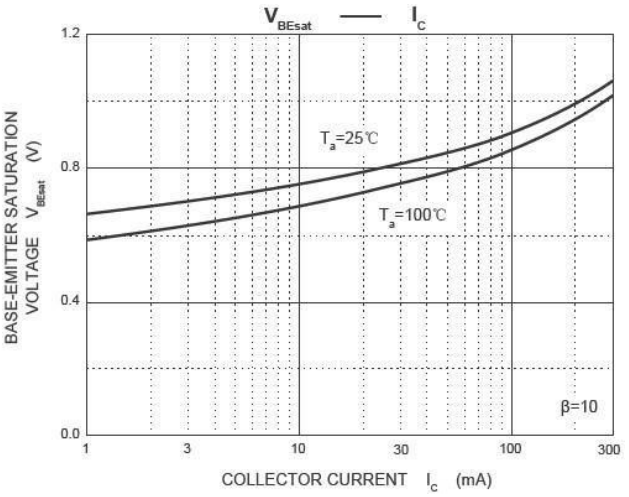
上升时间**Rise time**	t_r	0.5V, I_C=10mA , I_{B1}=-I_{B2}= 1mA			35	nS
存储时间**Storage time**	t_s	V_{CC}=3V, I_C=10mA, I_{B1}=-I_{B2}=1mA			200	nS
下降时间**Fall time**	t_f				50	nS

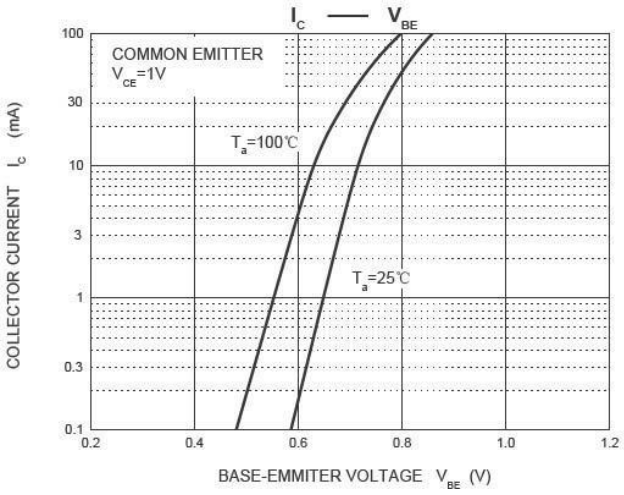
典型特性曲线**Typical Characteristics Curve**

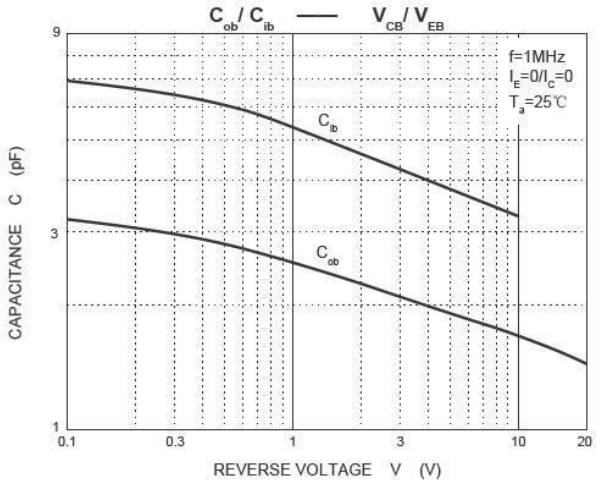


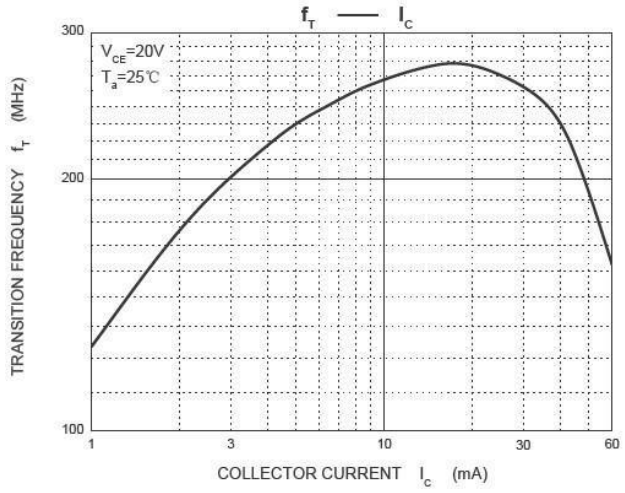


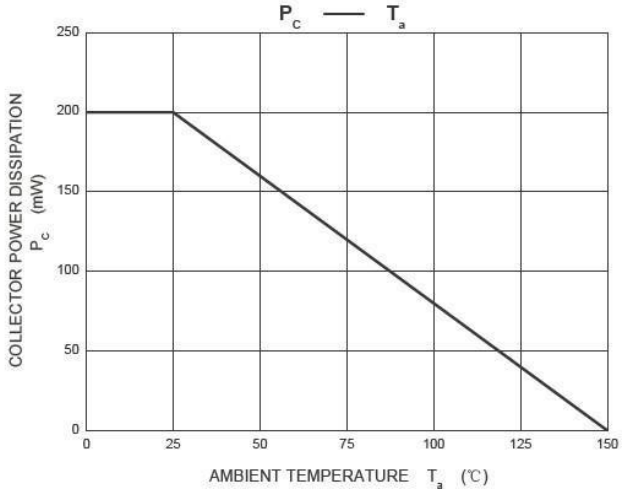




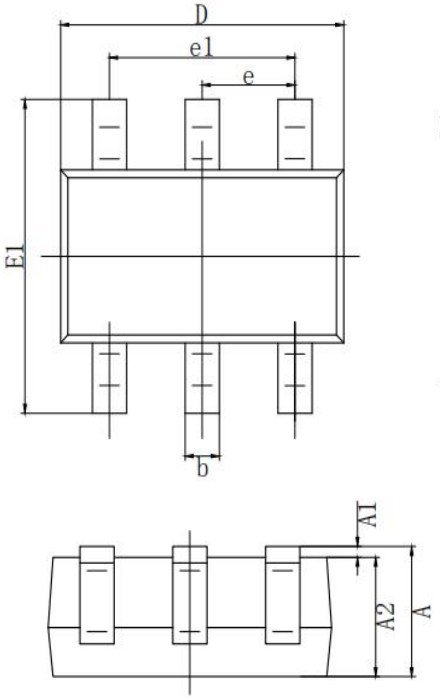








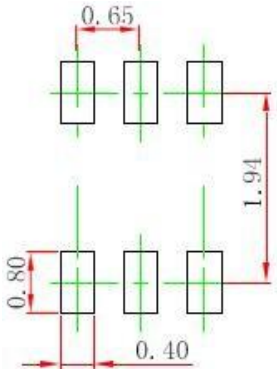
封装外形图 SOT-363 Package Outline Dimensions



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.