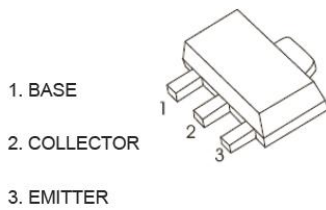


**SOT-89-3L****SOT-89-3L Plastic-Encapsulate Transistors****特征 Features**

- Complementary to A42
- Power Dissipation of 500mW
- High Breakdown Voltage
- Low Collector-Emitter Saturation Voltage

**机械数据 Mechanical Data**

- SOT-89-3L Small Outline Plastic Package
- Epoxy UL: 94V-0
- Mounting Position: Any

**Marking: A92**

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 <sub>CB0</sub>	-310	V
Collector-Emitter Voltage	V <sub>CEO</sub>	-305	V
Emitter -Base Voltage	V <sub>EBO</sub>	-5	V
Collector Current-Continuous	I <sub>C</sub>	-200	mA
Collector Current-pulsed	I <sub>CM</sub>	-500	mA
Collector Power Dissipation	P <sub>C</sub>	500	mW
Junction Temperature	T <sub>J</sub>	150	℃
Storage Temperature	T <sub>stg</sub>	-55-+150	℃
Thermal resistance From junction to ambient	R <sub>θJA</sub>	250	℃/W

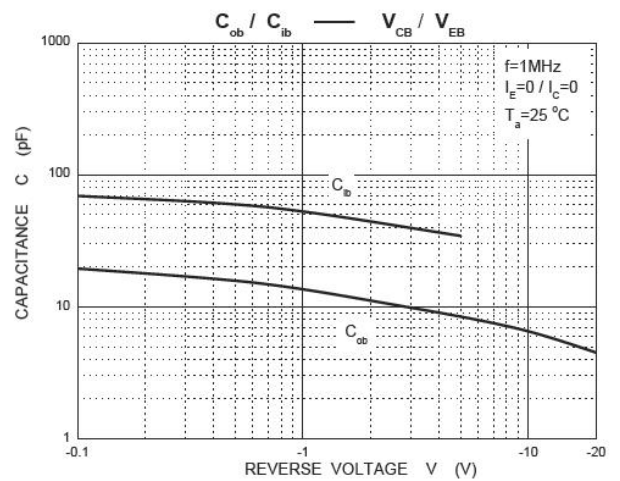
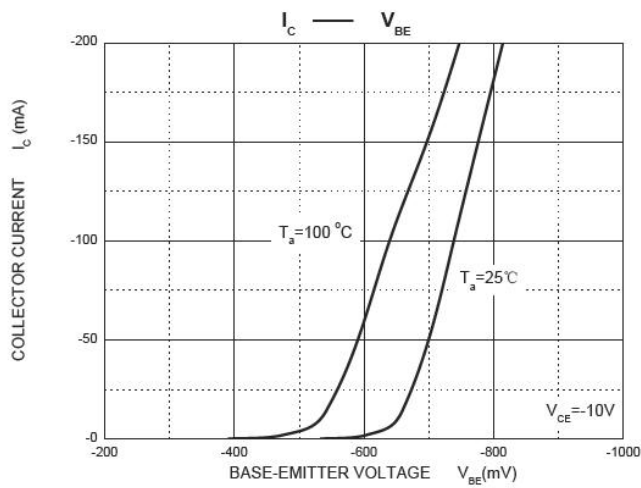
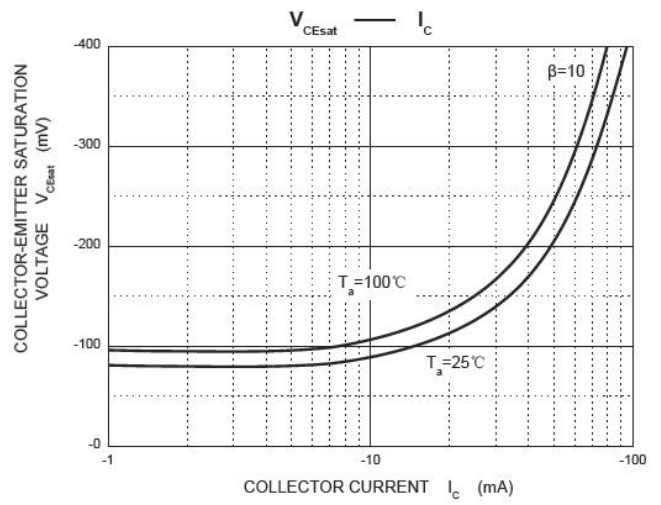
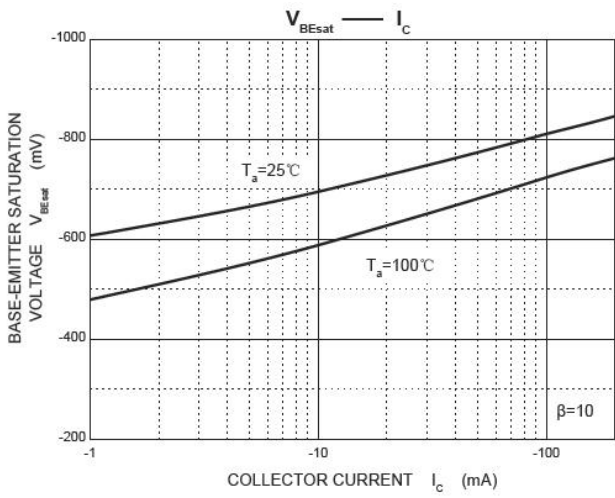
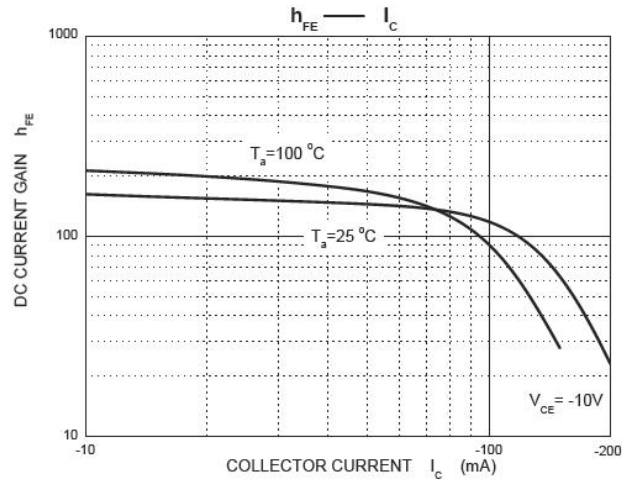
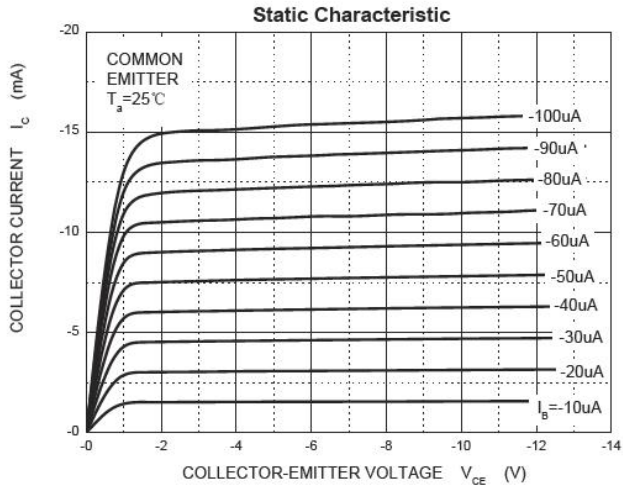
电特性 (TA = 25℃ 除非另有规定)

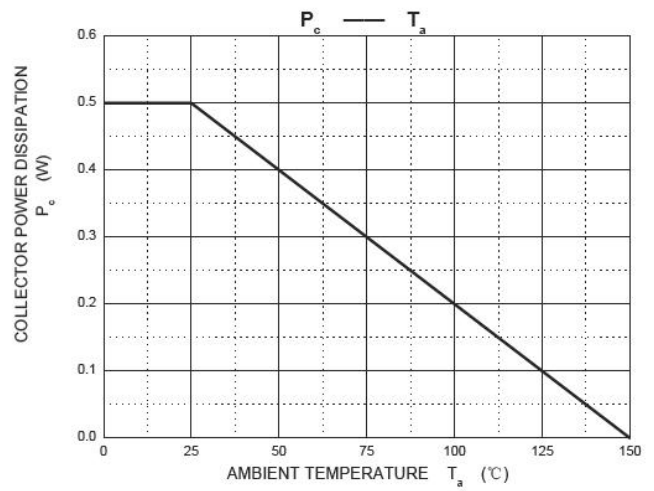
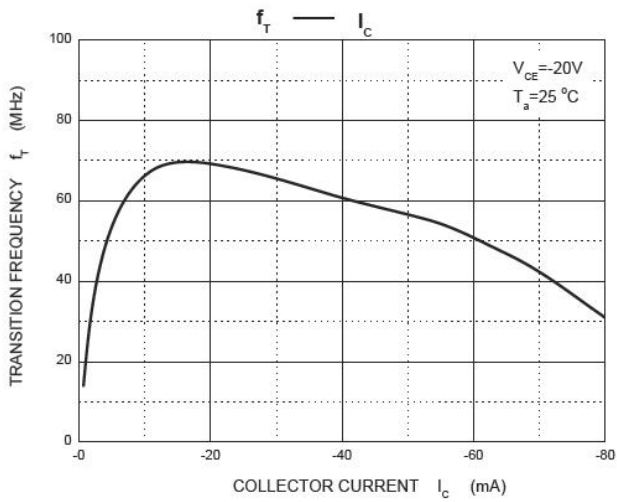
**Electrical Characteristics** (Ratings at 25℃ ambient temperature unless otherwise specified).

参数 Parameter	符号 Symbols	测试条件 Test Condition	界限 Limits		单位 Unit
			Min	Max	
Collector-base breakdown voltage	V(BR)CBO	I <sub>C</sub> =-100μA, I <sub>E</sub> =0	-310		V
Collector-emitter breakdown voltage	V(BR)CEO *	I <sub>C</sub> =-1mA, I <sub>B</sub> =0	-305		V
Emitter-base breakdown voltage	V(BR)EBO	I <sub>E</sub> =-100μA, I <sub>C</sub> =0	-6		V
Collector cut-off current	I <sub>CEO</sub>	V <sub>CB</sub> =-200V, I <sub>E</sub> =0		-250	nA
		V <sub>CE</sub> =-200V, I <sub>B</sub> =0		-250	nA
		V <sub>CE</sub> =-300V, I <sub>B</sub> =0		-5	μA
Emitter cut-off current	I <sub>EBO</sub>	V <sub>EB</sub> =-5V, I <sub>C</sub> =0		-100	nA
DC current gain	h <sub>FE</sub> (1) *	V <sub>CE</sub> =-10V, I <sub>C</sub> =-1mA	60		
		V <sub>CE</sub> =-10V, I <sub>C</sub> =-10mA	100	300	
		V <sub>CE</sub> =-10V, I <sub>C</sub> =-80mA	60		
Collector-emitter saturation voltage	V <sub>CE(sat)</sub> *	I <sub>C</sub> =-20mA, I <sub>B</sub> =-2mA		-0.2	V
Base -emitter saturation voltage	V <sub>BE(sat)</sub> *	I <sub>C</sub> =-20mA, I <sub>B</sub> =-2mA		-0.9	V
Transition frequency	f <sub>T</sub>	V <sub>CE</sub> =-20V, I <sub>C</sub> =10mA, f=30MHz	50		MHz

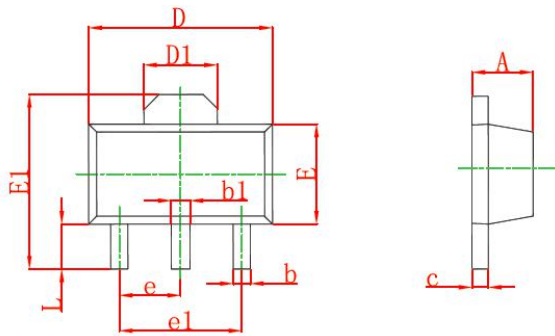
\*Pulse test: pulse width ≤ 300us, duty cycle ≤ 2.0%

Typical characteristics





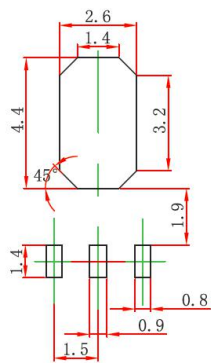
**SOT-89-3L PACKAGE OUTLINE** Plastic surface mounted package



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	1.400	1.600	0.055	0.063
b	0.320	0.520	0.013	0.020
b1	0.400	0.580	0.016	0.023
c	0.350	0.440	0.014	0.017
D	4.400	4.600	0.173	0.181
D1	1.550 REF.		0.061 REF.	
E	2.300	2.600	0.091	0.102
E1	3.940	4.250	0.155	0.167
e	1.500 TYP.		0.060 TYP.	
e1	3.000 TYP.		0.118 TYP.	
L	0.900	1.200	0.035	0.047

**焊盘设计参考** Precautions: PCB Design

Recommended land dimensions for SOT-89-3L diode. 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.