

1. BASE

2. COLLECTOR

3. EMITTER

MARKING: BCX51:AA, BCX51-10:AC, BCX51-16:AD
BCX52:AE, BCX52-10:AG, BCX52-16:AM
BCX53:AH, BCX53-10:AK, BCX53-16:AL

特征 Features

- Complementary to BCX54,BCX55,BCX56;
- Medium Power General Purposes;
- Driver Stages of Audio Amplifiers.

机械数据 Mechanical Data

- SOT-89-3L Small Outline Plastic Package
- Epoxy UL: 94V-0
- 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	TYPE	数值 Value	单位 Unit
Collector-Base Voltage	V _{CBO}	BCX51 BCX52 BCX53	-45 -60 -100	V
Collector-Emitter Voltage	V _{CEO}	BCX51 BCX52 BCX53	-45 -60 -80	V
Emitter -Base Voltage	V _{EBO}		-5	V
Collector Current-Continuous	I _C		-1.0	A
Peak Collector Current(single pulse tp=1ms)	I _{CM}		-2.0	A
Collector Power Dissipation	P _C		500	mW
Junction Temperature	T _J		150	°C
Storage Temperature	T _{stg}		-55-+150	°C
Thermal resistance From junction to ambient	R _{θJA}		250	°C/W

电特性 (TA = 25°C 除非另有规定)

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

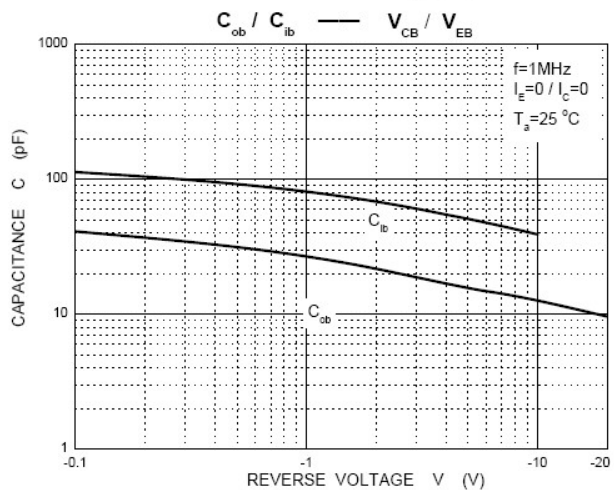
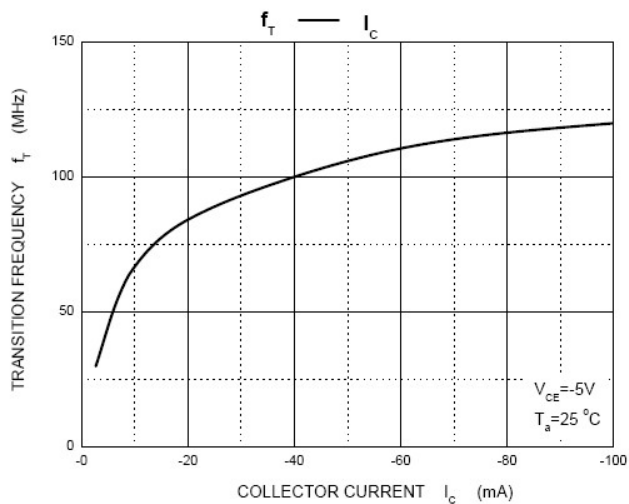
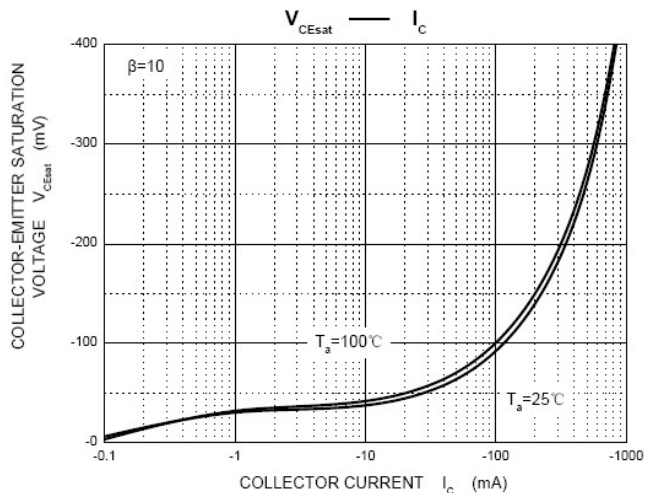
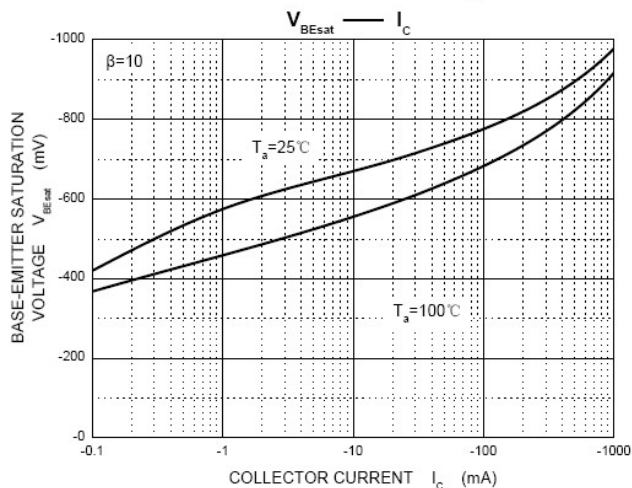
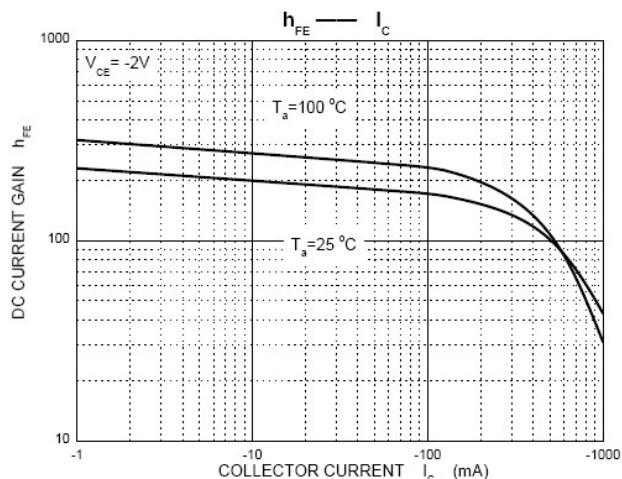
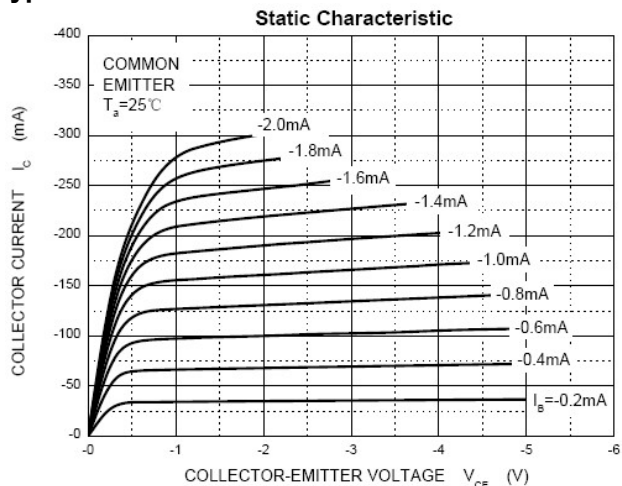
参数 Parameter	符号 Symbols	测试条件 Test Condition	界限 Limits			单位 Unit
			Min	Typ	Max	
Collector-base breakdown voltage	V _{(BR)CBO}	I _C =-100uA, I _E =0	BCX51 BCX52 BCX53 -45 -60 -100			V
Collector-emitter breakdown voltage	V _{(BR)CEO}	I _C =-10mA, I _B =0	BCX51 BCX52 BCX53 -45 -60 -80			V
Emitter-base breakdown voltage	V _{(BR)EBO}	I _E =-100uA, I _C =0	-5			V
Collector cut-off current	I _{CBO}	V _{CB} =-30V, I _E =0			-100	nA
Emitter cut-off current	I _{EBO}	V _{EB} =-5V, I _C =0			-100	nA
DC current gain	h _{FE} (1)	V _{CE} =-2V, I _C =-5mA	63			
	h _{FE} (2)	V _{CE} =-2V, I _C =-150mA	63		250	
	h _{FE} (3)	V _{CE} =-2V, I _C =-500mA	25			
Collector-emitter saturation voltage	V _{CE(sat)}	I _C =-500mA, I _B =-50mA			-0.5	V
Base -emitter voltage	V _{BE}	V _{CE} =-2V, I _C =-500mA			-1.0	V
Transition frequency	f _T	V _{CE} =-5V, I _C =-10mA, f=100MHz		50		MHz

CLASSIFICATION OF h_{FE}(2)

RANK	BCX51 BCX52 BCX53	BCX51-10 BCX52-10 BCX53-10	BCX51-16 BCX52-16 BCX53-16
RANGE	63-250	63-160	100-250

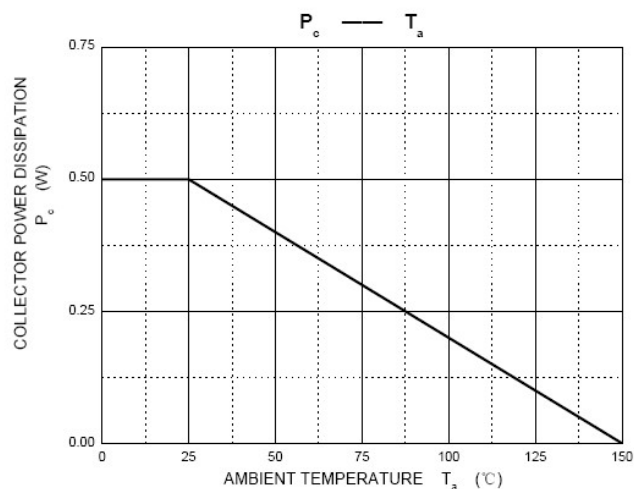
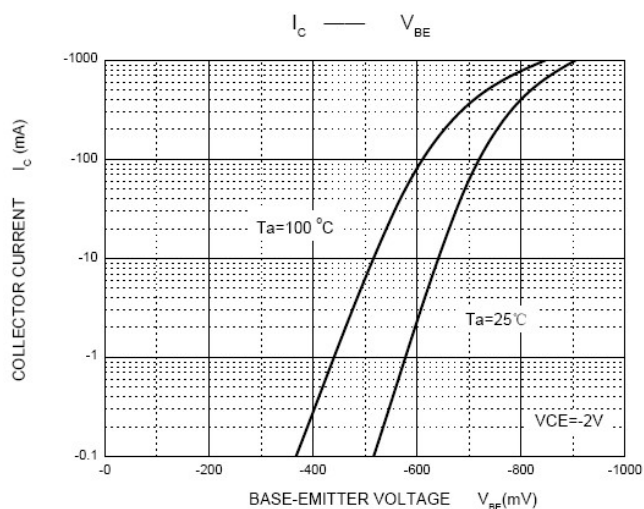
SOT-89-3L 贴片塑封三极管
SOT-89-3L Plastic-Encapsulate Transistors

Typical characteristics

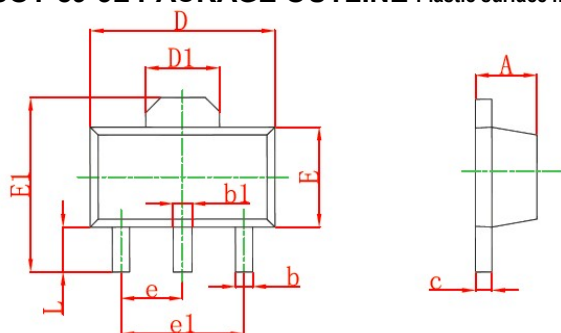


SOT-89-3L 贴片塑封三极管

SOT-89-3L Plastic-Encapsulate Transistors



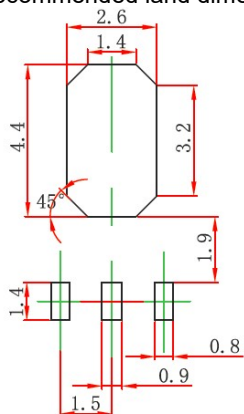
SOT-89-3L PACKAGE OUTLINE Plastic surface mounted package



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