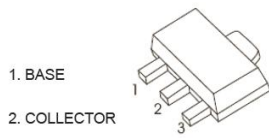


SOT-89-3L



MARKING: BCX54:BA, BCX54-10:BC, BCX54-16:BD  
BCX55:BE, BCX55-10:BG, BCX55-16BM  
BCX56:B H, BCX56-10:BK, BCX56-16:BL

特征 Features

- 与 BCX51,BCX52,BCX53 配对; Complementary to BCX51, BCX52,BCX53
- 最大功率耗散 500mW; Power Dissipation of 500mW
- 高稳定性和可靠性。 High Stability and High Reliability

机械数据 Mechanical Data

- 封装: SOT-89-3L 封装 SOT-89-3L 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°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 <sub>CB0</sub>	BCX54 BCX55 BCX56	45 60 100	V
Collector-Emitter Voltage	V <sub>CEO</sub>	BCX54 BCX55 BCX56	45 60 80	V
Emitter -Base Voltage	V <sub>EBO</sub>		5	V
Collector Current-Continuous	I <sub>C</sub>		1.0	A
Base Curren	I <sub>B</sub>		0.1	A
Collector Power Dissipation	P <sub>C</sub>		500	mW
Junction Temperature	T <sub>J</sub>		150	°C
Storage Temperature	T <sub>stg</sub>		-55-+150	°C
Thermal resistance From junction to ambient	R <sub>θJA</sub>		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.)

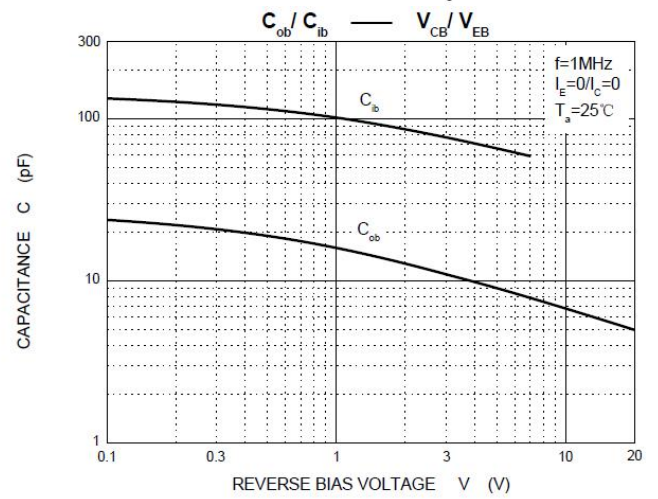
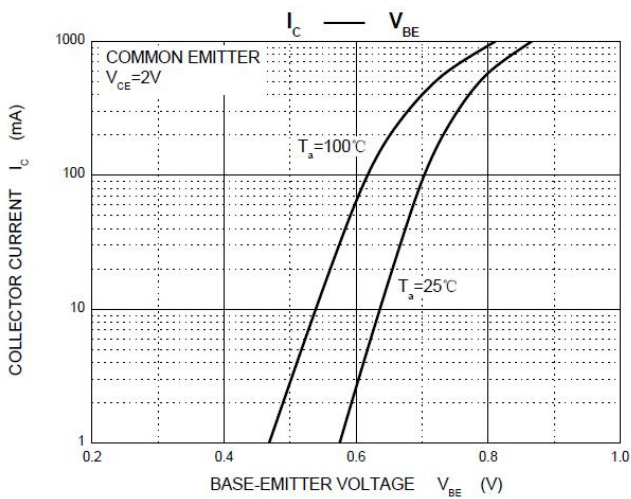
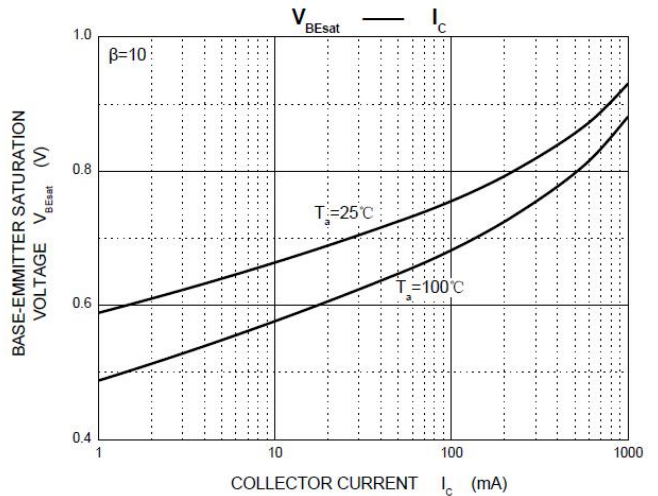
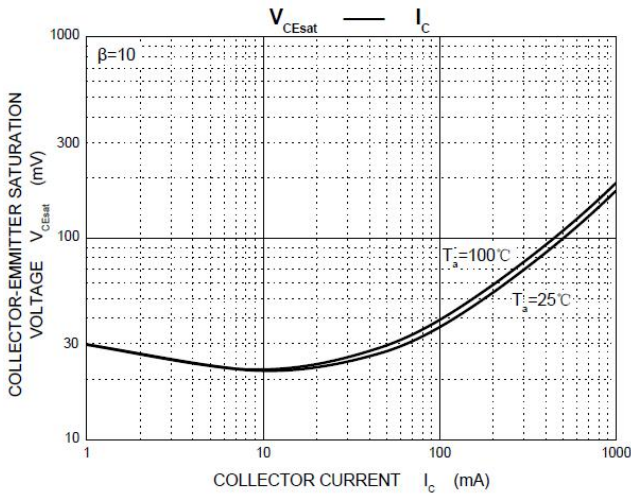
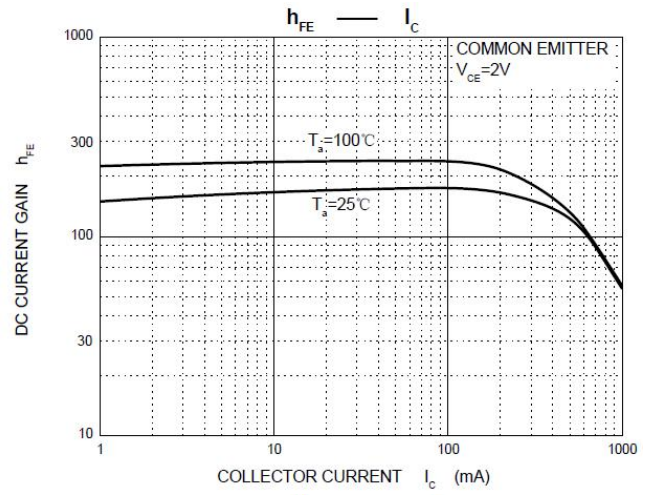
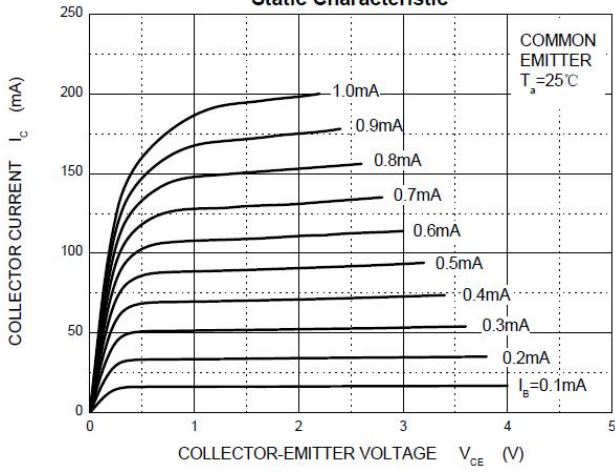
参数 Parameter	符号 Symbols	测试条件 Test Condition	界限 Limits			单位 Unit
			Min	Typ	Max	
Collector-base breakdown voltage	V <sub>(BR)CBO</sub>	I <sub>C</sub> =100μA, I <sub>E</sub> =0	BCX54 BCX55 BCX56	45 60 100		V
Collector-emitter breakdown voltage	V <sub>(BR)CEO</sub>	I <sub>C</sub> =10mA, I <sub>B</sub> =0	BCX54 BCX55 BCX56	45 60 80		V
Emitter-base breakdown voltage	V <sub>(BR)EBO</sub>	I <sub>E</sub> =10μA, I <sub>C</sub> =0		5		V
Collector cut-off current	I <sub>CBO</sub>	V <sub>CB</sub> =30V, I <sub>E</sub> =0			100	nA
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(1)</sub>	V <sub>CE</sub> =2V, I <sub>C</sub> =5mA		40		
	h <sub>FE(2)</sub>	V <sub>CE</sub> =2V, I <sub>C</sub> =150mA		63	250	
	h <sub>FE(3)</sub>	V <sub>CE</sub> =2V, I <sub>C</sub> =500mA		25		
Collector-emitter saturation voltage	V <sub>CE(sat)</sub>	I <sub>C</sub> =500mA, I <sub>B</sub> =50mA			0.50	V
Base -emitter voltage	V <sub>BE</sub>	V <sub>CE</sub> =2V, I <sub>C</sub> =500mA			1.00	V
Transition frequency	f <sub>T</sub>	V <sub>CE</sub> =5V, I <sub>C</sub> =10mA, f=100MHz		130		MHz

CLASSIFICATION OF h<sub>FE(1)</sub>

RANK	BCX54 BCX55 BCX56	BCX54-10 BCX55-10 BCX56-10	BCX54-16 BCX55-16 BCX56-16
RANGE	63-250	63-160	100-250

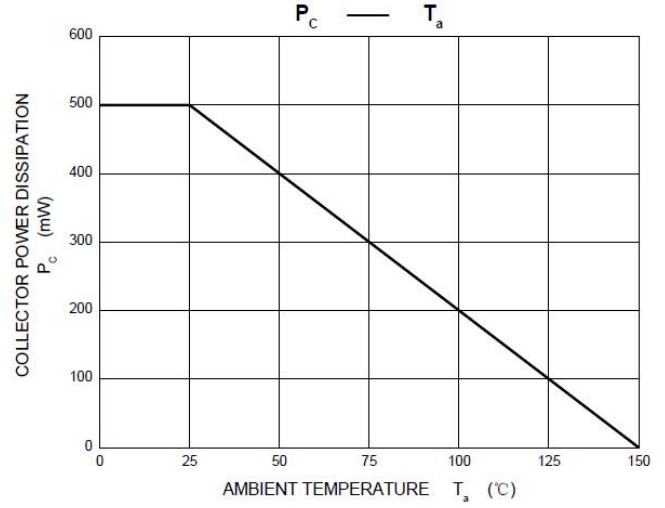
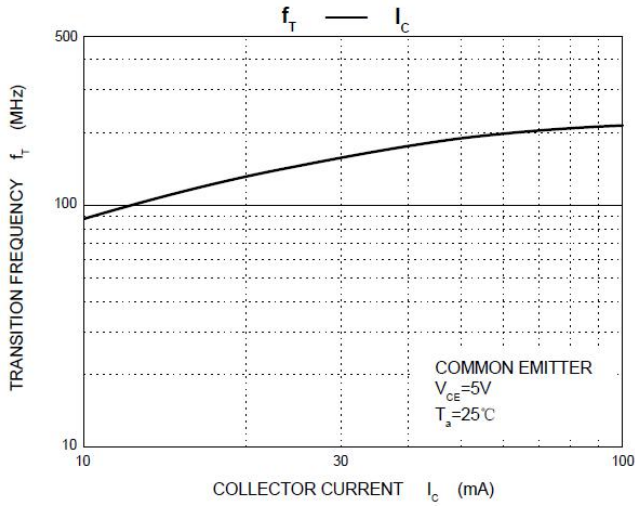
# Typical characteristics

Static Characteristic

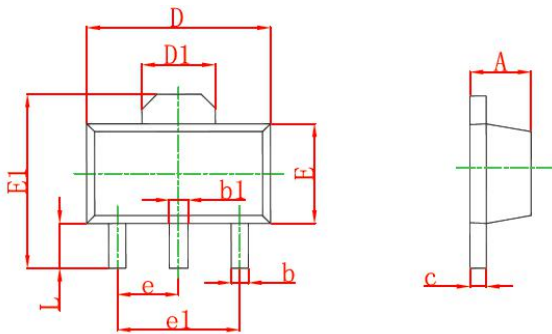


BCX54, BCX55, BCX56





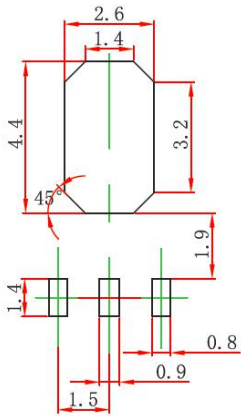
### SOT-89-3L PACKAGE OUTLINE Plastic surface mounted package



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.