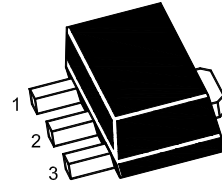


## SOT-89 Plastic-Encapsulate Transistors

TRANSISTOR (NPN)

### FEATURES

- PNP Complements to BCX51,BCX52,BCX53
- Low Voltage
- High Current



1.Base 2.Collector 3.Emitter  
SOT-89 Plastic Package

### APPLICATIONS

- Driver Stages of Audio Amplifiers

**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**

**MAXIMUM RATINGS (T<sub>a</sub>=25°C unless otherwise noted)**

Symbol	Parameter	Value	Unit
<b>V<sub>CBO</sub></b>	Collector-Base Voltage	BCX54	45
		BCX55	60
		BCX56	100
<b>V<sub>CEO</sub></b>	Collector-Emitter Voltage	BCX54	45
		BCX55	60
		BCX56	80
<b>V<sub>EBO</sub></b>	Emitter-Base Voltage	5	V
<b>I<sub>C</sub></b>	Collector Current	1	A
<b>P<sub>C</sub></b>	Collector Power Dissipation	500	mW
<b>R<sub>θJA</sub></b>	Thermal Resistance From Junction To Ambient	250	°C/W
<b>T<sub>j</sub></b>	Junction Temperature	150	°C
<b>T<sub>stg</sub></b>	Storage Temperature	-55~+150	°C



**CHINA BASE**  
INTERNATIONAL

**SOT-89**



**BCX54-BCX55-BCX56**

www.china-base.com.hk

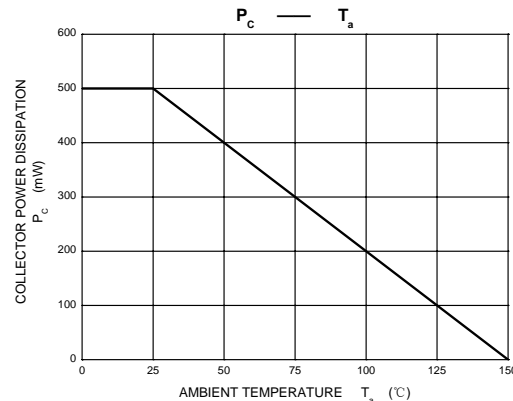
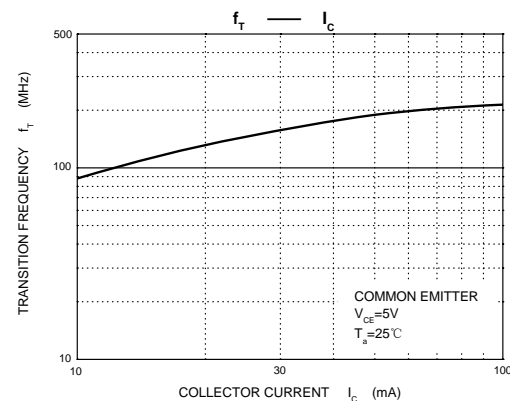
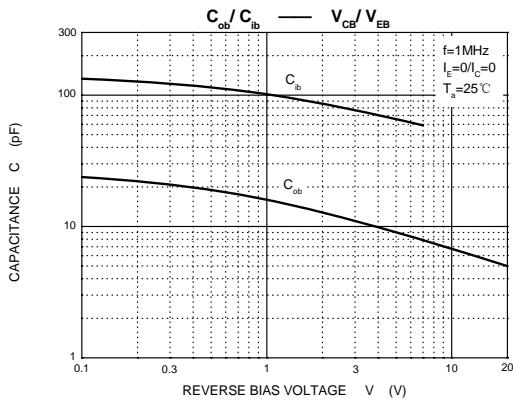
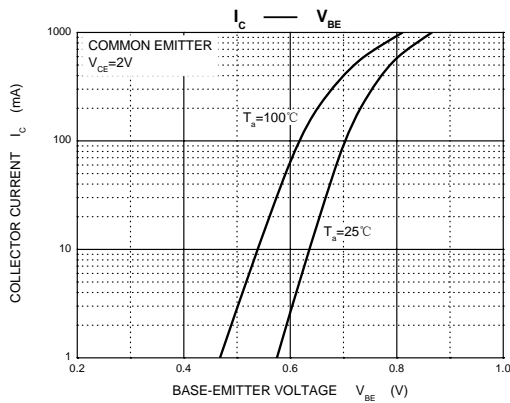
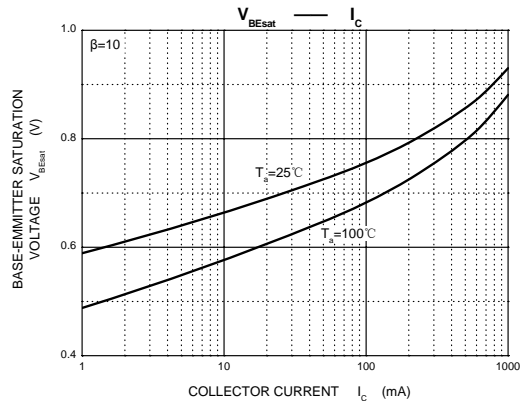
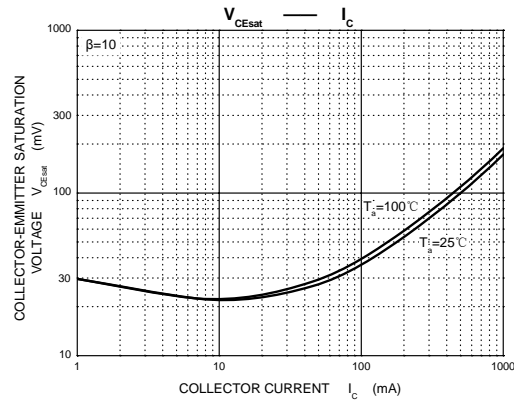
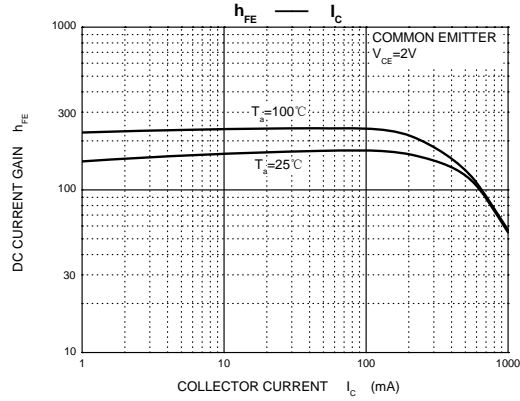
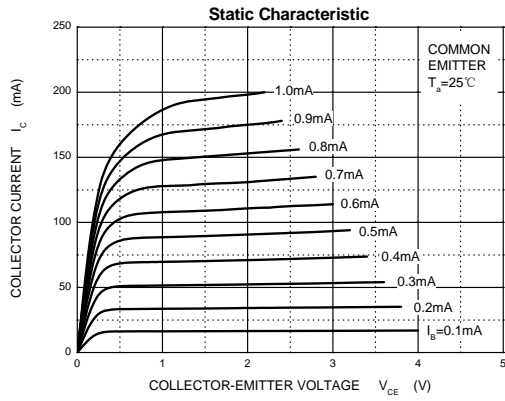
Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=100\mu A, I_E=0$	BCX54	45		V
			BCX55	60		
			BCX56	100		
Collector-emitter breakdown voltage	$V_{(BR)CEO^*}$	$I_C=10mA, I_B=0$	BCX54	45		V
			BCX55	60		
			BCX56	80		
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=100\mu A, I_C=0$	5			V
Collector cut-off current	$I_{CBO}$	$V_{CB}=30V, I_E=0$			0.1	$\mu A$
Emitter cut-off current	$I_{EBO}$	$V_{EB}=5V, I_C=0$			0.1	$\mu A$
DC current gain	$h_{FE(1)^*}$	$V_{CE}=2V, I_C=5mA$	40			
	$h_{FE(2)^*}$	$V_{CE}=2V, I_C=150mA$	63		250	
	$h_{FE(3)^*}$	$V_{CE}=2V, I_C=0.5A$	25			
Collector-emitter saturation voltage	$V_{CE(sat)^*}$	$I_C=0.5A, I_B=50mA$			0.5	V
Base-emitter voltage	$V_{BE^*}$	$V_{CE}=2V, I_C=0.5A$			1	V
Transition frequency	$f_T$	$V_{CE}=5V, I_C=10mA, f=100MHz$		130		MHz

**CLASSIFICATION OF  $h_{FE(2)}$**

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

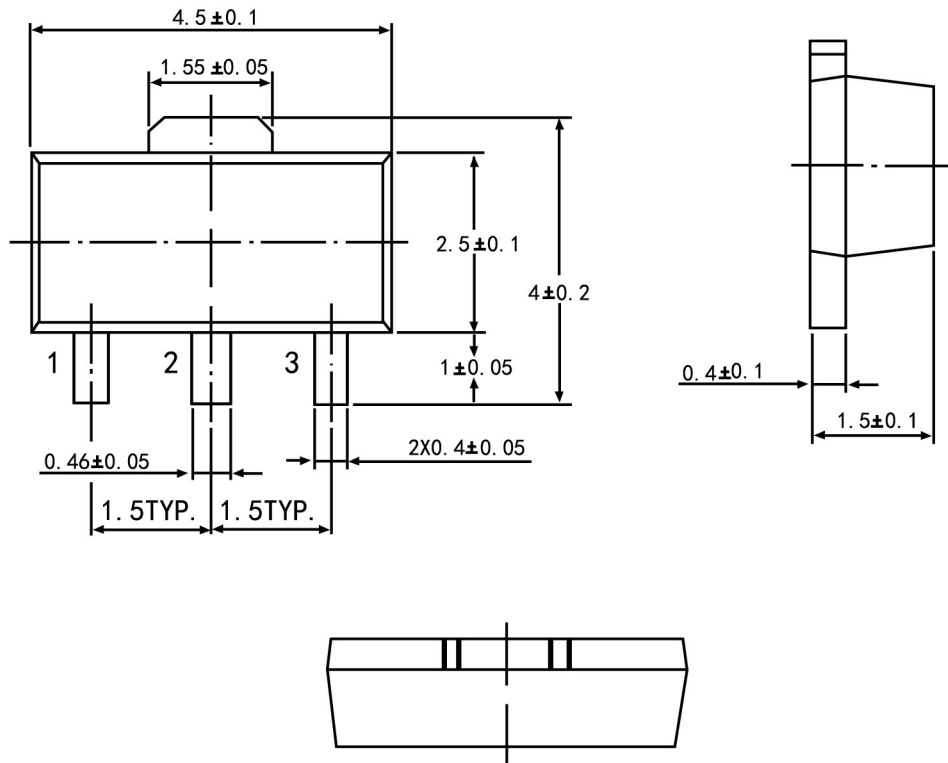
## Typical Characteristics

## BCX54,BCX55,BCX56





SOT-89 PACKAGE OUTLINE



Symbol	Dimension in Millimeters	
	Min	Max
A	1.40	1.60
B	0.44	0.62
B1	0.35	0.54
C	0.35	0.44
D	4.40	4.60
D1	1.62	1.83
E	2.29	2.60
e	1.50 Typ	
H	3.94	4.25
H1	2.63	2.93
L	0.89	1.20
All Dimensions In mm		