

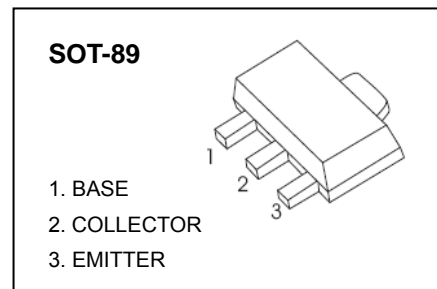
## BCX54 THRU BCX56 TRANSISTOR(NPN)

### FEATURE

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

### APPLICATIONS

- Driver Stages of Audio Amplifiers



### MAXIMUM RATINGS ( $T_A=25^{\circ}\text{C}$ unless otherwise noted)

Symbol	Parameter	Value	Unit
$V_{CBO}$	Collector-Base Voltage	BCX54	45
		BCX55	60
		BCX56	100
$V_{CEO}$	Collector-Emitter Voltage	BCX54	45
		BCX55	60
		BCX56	80
$V_{EBO}$	Emitter-Base Voltage	5	V
$I_C$	Collector Current	1	A
$P_C$	Collector Power Dissipation	500	mW
$R_{\theta JA}$	Thermal Resistance From Junction To Ambient	250	$^{\circ}\text{C}/\text{W}$
$T_j$	Junction Temperature	150	$^{\circ}\text{C}$
$T_{stg}$	Storage Temperature	-55~+150	$^{\circ}\text{C}$

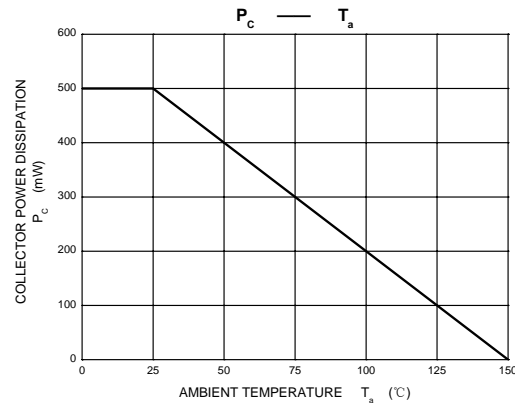
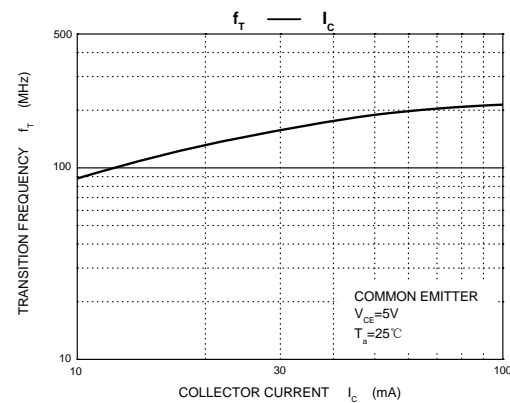
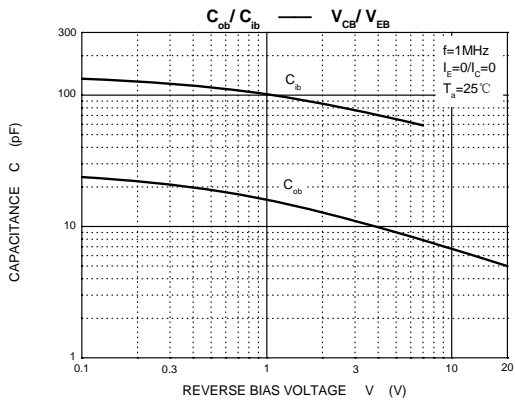
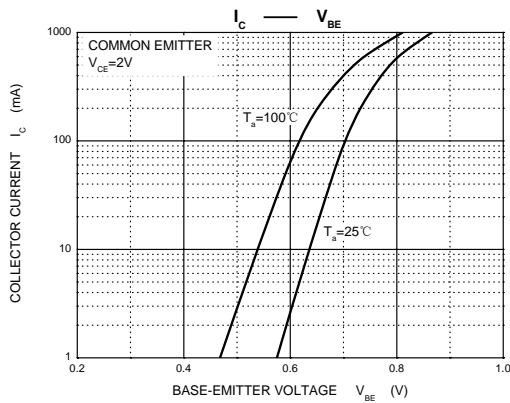
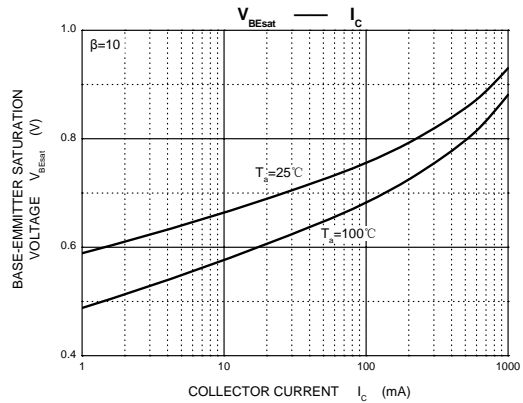
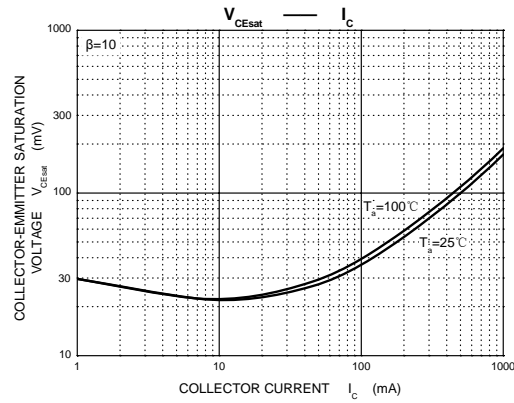
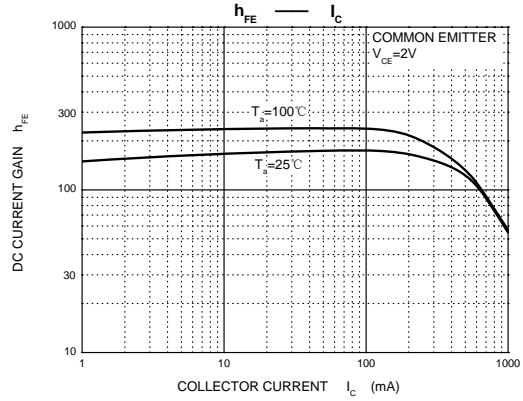
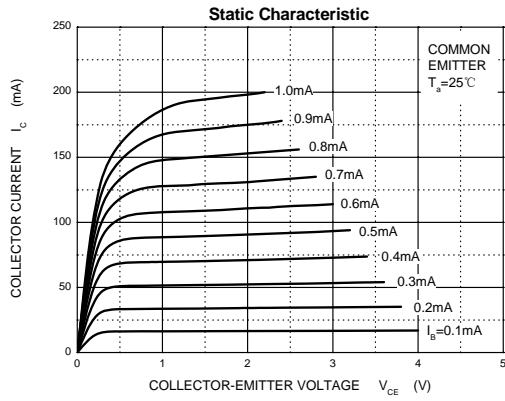
**ELECTRICAL CHARACTERISTICS (Ta=25°C unless otherwise specified)**

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  $h_{FE(2)}$** 

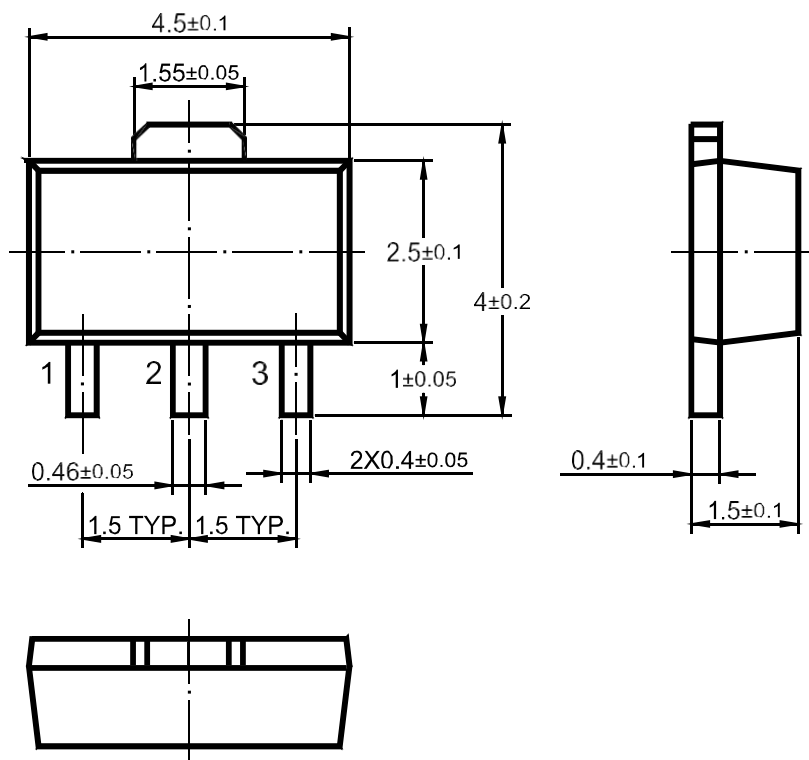
RANK	BCX54	BCX54-10	BCX54-16
	BCX55	BCX55-10	BCX55-16
	BCX56	BCX56-10	BCX56-16
RANGE	63 - 250	63 - 160	100 - 250

## TYPICAL CHARACTERISTICS



Physical Dimensions

SOT-89



Dimensions in mm