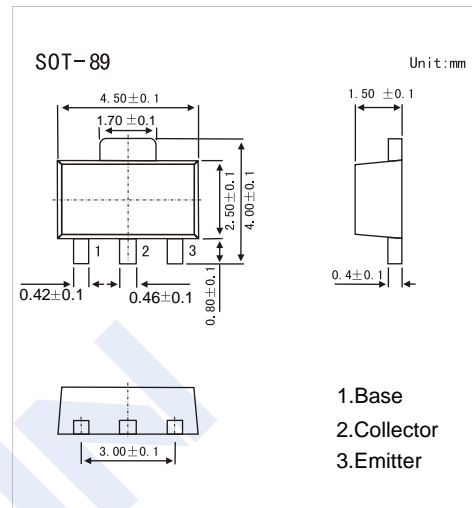


## PNP Transistors

### BCX51、BCX52、BCX53 (KCX51、KCX52、KCX53)

#### ■ Features

- NPN Complements to BCX54,BCX55,BCX56
- Low Voltage
- High Current



#### ■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

Parameter	Symbol	Rating	Unit	
Collector-base voltage	BCX51	$V_{CB0}$	-45	V
	BCX52		-60	V
	BCX53		-100	V
Collector-emitter voltage	BCX51	$V_{CE0}$	-45	V
	BCX52		-60	V
	BCX53		-80	V
Emitter-base voltage	$V_{EBO}$	-5	V	
Collector current	$I_C$	-1	A	
Peak collector current	$I_{CM}$	-1.5	A	
Peak base current	$I_{BM}$	-200	mA	
Total power dissipation	$P_{tot}$	1.3	W	
Storage temperature	$T_{stg}$	-65 to +150	$^\circ\text{C}$	
Junction temperature	$T_j$	150	$^\circ\text{C}$	
Operating ambient temperature	$T_{amb}$	-65 to +150	$^\circ\text{C}$	
Thermal resistance from junction to ambient	$R_{th(j-a)}$	94	K/W	
Thermal resistance from junction to solder point	$R_{th(j-s)}$	14	K/W	

## BCX51、BCX52、BCX53 (KCX51、KCX52、KCX53)

### ■ Electrical Characteristics $T_a = 25^\circ\text{C}$

Parameter	Symbol	Testconditions	Min	Typ	Max	Unit
Collector cutoff current	I <sub>CBO</sub>	V <sub>CB</sub> = -30 V, I <sub>E</sub> = 0			-100	nA
		V <sub>CB</sub> = -30 V, I <sub>E</sub> = 0; T <sub>j</sub> = 125°C			-10	uA
Emitter cutoff current	I <sub>EBO</sub>	V <sub>EB</sub> = -5 V, I <sub>C</sub> = 0			-100	nA
DC current gain	h <sub>FE</sub>	I <sub>C</sub> = -5 mA; V <sub>CE</sub> = -2 V	63			
		I <sub>C</sub> = -150 mA; V <sub>CE</sub> = -2 V	63		250	
		I <sub>C</sub> = -500 mA; V <sub>CE</sub> = -2 V	40			
DC current gain BCX51-10,BCX52-10,BCX53-10 BCX51-16,BCX52-16,BCX53-16	h <sub>FE</sub>	I <sub>C</sub> = -150 mA; V <sub>CE</sub> = -2 V	63		160	
		I <sub>C</sub> = -150 mA; V <sub>CE</sub> = -2 V	100		250	
Collector-emitter saturation voltage	V <sub>CE(sat)</sub>	I <sub>C</sub> = -500 mA; I <sub>B</sub> = -50 mA			-500	mV
Base to emitter voltage	V <sub>BE</sub>	I <sub>C</sub> = -500 mA; V <sub>CE</sub> = -2 V			-1	V
Transition frequency	f <sub>T</sub>	I <sub>C</sub> = -10 mA; V <sub>CE</sub> = -5 V; f = 100 MHz		50		MHz

### ■ h<sub>FE</sub> Classification

TYPE	BCX51	BCX51-10	BCX51-16
Marking	AA	AC	AD

TYPE	BCX52	BCX52-10	BCX52-16
Marking	AE	AG	AM

TYPE	BCX53	BCX53-10	BCX53-16
Marking	AH	AK	AL

### ■ Typical Characteristics

