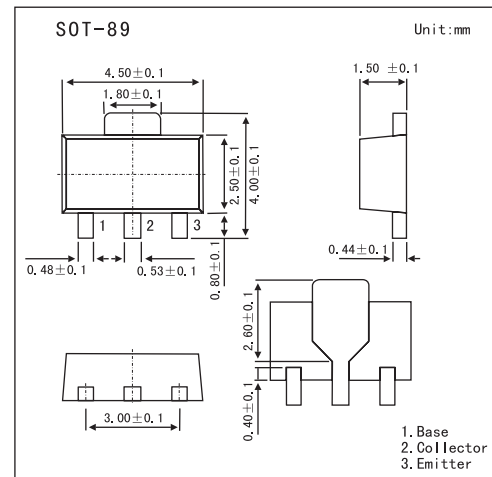


PNP Medium Power Transistors

BCX51,BCX52,BCX53

■ Features

- High current (max. 1 A).
- Low voltage (max. 80 V).

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

Parameter		Symbol	Rating	Unit
Collector-base voltage	BCX51	V_{CB0}	-45	V
	BCX52		-60	
	BCX53		-100	
Collector-emitter voltage	BCX51	V_{CEO}	-45	V
	BCX52		-60	
	BCX53		-80	
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		R_{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■ Electrical Characteristics $T_a = 25^\circ\text{C}$

Parameter	Symbol	Testconditions	Min	Typ	Max	Unit
Collector cutoff current	I _{CBO}	V _{CB} = -30 V, I _E = 0			-100	nA
		V _{CB} = -30 V, I _E = 0; T _j = 125°C			-10	μA
Emitter cutoff current	I _{EBO}	V _{EB} = -5 V, I _C = 0			-100	nA
DC current gain	h _{FE}	I _C = -5 mA; V _{CE} = -2 V	63			
		I _C = -150 mA; V _{CE} = -2 V	63		250	
		I _C = -500 mA; V _{CE} = -2 V	40			
DC current gain BCX51-10,BCX52-10,BCX53-10 BCX51-16,BCX52-16,BCX53-16	h _{FE}	I _C = -150 mA; V _{CE} = -2 V	63		160	
		I _C = -150 mA; V _{CE} = -2 V	100		250	
Collector-emitter saturation voltage	V _{CE(sat)}	I _C = -500 mA; I _B = -50 mA			-500	mV
Base to emitter voltage	V _{BE}	I _C = -500 mA; V _{CE} = -2 V			-1	V
Transition frequency	f _T	I _C = -10 mA; V _{CE} = -5 V; f = 100 MHz		50		MHz

■ h_{FE} 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