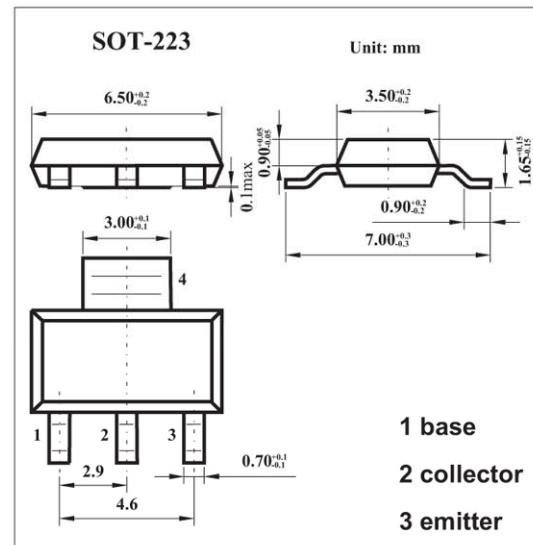


## ● Features

- High collector current
- 1.3 W power dissipation.



## ● Absolute Maximum Ratings Ta = 25°C

Parameter	Symbol	Rating	Unit
collector-base voltage	BCP54	45	V
	BCP55	60	V
	BCP56	100	V
collector-emitter voltage	BCP54	45	V
	BCP55	60	V
	BCP56	80	V
emitter-base voltage	VEBO	5	V
collector current (DC)	IC	1	A
peak collector current	ICM	1.5	A
peak base current	IBM	0.2	A
total power dissipation	P <sub>tot</sub>	1.33	W
storage temperature	T <sub>stg</sub>	-65 to +150	°C
junction temperature	T <sub>j</sub>	150	°C
operating ambient temperature	T <sub>amb</sub>	-65 to +150	°C
thermal resistance from junction to ambient	R <sub>th j-a</sub>	94	K/W
thermal resistance from junction to soldering point	R <sub>th j-s</sub>	13	K/W



● Electrical Characteristics Ta = 25°C

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
collector cut-off current	IcBO	IE = 0 A; VCB = 30 V			100	nA
		IE = 0 A; VCB = 30 V; Tj = 150 °C			10	μA
emitter cut-off current	IEBO	Ic = 0 A; VEB = 5 V			100	nA
DC current gain	hFE	Ic = 5 mA; VCE = 2 V	63			
		Ic = 150 mA; VCE = 2 V	63		250	
		Ic = 500 mA; VCE = 2 V	40			
DC current gain BCP54-10; BCP55-10; BCP56-10 BCP54-16; BCP55-16; BCP56-16	hFE	VCE = 2 V; Ic = 150 mA	63		160	
			100		250	
collector-emitter saturation voltage	VCEsat	Ic = 0.5 A; Ib = 50 mA			500	mV
base-emitter voltage	VBE	Ic = 0.5 A; VCE = 2 V			1	V
transition frequency	fT	Ic = 10 mA; VCE = 5 V; f = 100 MHz		130		MHz
DC current gain ratio of the complementary pairs	$\frac{h_{FE1}}{h_{FE2}}$	Ic  = 150 mA;  VCE  = 2 V			1.6	

