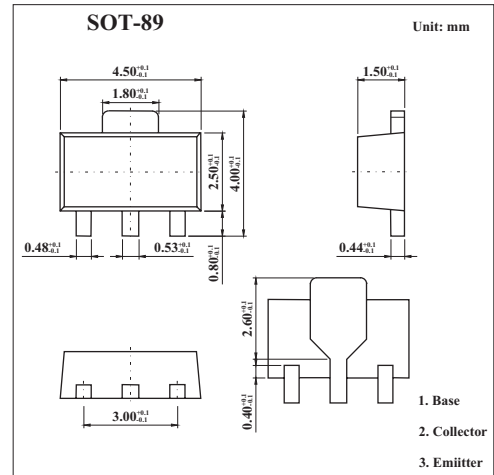


BCX69

■ Features

- For general AF applications.
- High collector current.
- High current gain.
- Low collector-emitter saturation voltage.



■ Absolute Maximum Ratings Ta = 25°C

Parameter	Symbol	Rating	Unit
Collector-base voltage	V _{CB0}	20	V
Collector-emitter voltage	V _{CEO}	25	V
Emitter-base voltage	V _{EBO}	5	V
Collector current	I _C	1	A
Peak collector current	I _{CM}	2	A
Base current	I _B	100	mA
Peak base current	I _{BM}	200	mA
Total power dissipation	P _{tot}	1	W
Junction temperature	T _j	150	°C
Storage temperature	T _{stg}	-65 to +150	°C
Junction - soldering point	R _{thJS}	≤20	K/W

BCX69

■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit	
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = 30\text{ mA}, I_B = 0$	20			V	
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C = 10\text{ }\mu\text{A}, I_B = 0$	25			V	
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E = 1\text{ }\mu\text{A}, I_C = 0$	5			V	
Collector cutoff current	I_{CBO}	$V_{CB} = 25\text{ V}, I_E = 0$			100	nA	
		$V_{CB} = 25\text{ V}, I_E = 0, T_A = 150\text{ }^\circ\text{C}$			100	μA	
DC current gain *	hFE	$I_C = 5\text{ mA}, V_{CE} = 10\text{ V}$	50				
DC current gain *	BCX69 BCX69-10 BCX69-16 BCX69-25	hFE	$I_C = 500\text{ mA}, V_{CE} = 1\text{ V}$	85		375	
				85	100	160	
				100	160	250	
				160	250	375	
DC current gain *	hFE	$I_C = 1\text{ A}, V_{CE} = 1\text{ V}$	60				
Collector-emitter saturation voltage *	$V_{CE(sat)}$	$I_C = 1\text{ A}, I_B = 100\text{ mA}$			0.5	V	
Base-emitter voltage *	$V_{BE(ON)}$	$I_C = 5\text{ mA}, V_{CE} = 10\text{ V}$		0.6			
		$I_C = 1\text{ A}, V_{CE} = 1\text{ V}$			1		
Transition frequency	fr	$I_C = 100\text{ mA}, V_{CE} = 5\text{ V}, f = 20\text{ MHz}$		100		MHz	

* Pulse test: $t \leq 300\mu\text{s}$, $D = 2\%$.

■ hFE Classification

TYPE	BCX69	BCX69-10	BCX69-16	BCX69-25
Marking	CE	CF	CG	CH