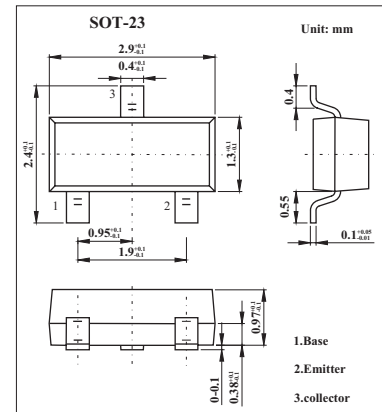


PNP Silicon AF Transistors KC807A(BC807A)



■ Features

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

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

Parameter	Symbol	Rating	Unit
Collector-base voltage	V_{CB0}	-50	V
Collector-emitter voltage	V_{CE0}	-45	V
Emitter-base voltage	V_{EB0}	-5	V
Collector current (DC)	I_C	-500	mA
Peak collector current	I_{CM}	-1	A
Base current	I_B	-100	mA
power dissipation	P_D	310	mW
Junction temperature	T_j	150	$^\circ\text{C}$
Storage temperature	T_{stg}	-65 to +150	$^\circ\text{C}$

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

Parameter	Symbol	Testconditions	Min	Typ	Max	Unit
Collector-to-base breakdown voltage	V_{CB0}	$I_C = -10 \mu\text{A}, I_E = 0$	-50			V
Collector-to-emitter breakdown voltage	V_{CE0}	$I_C = -10 \text{mA}, I_B = 0$	-45			V
Emitter-to-base breakdown voltage	V_{EB0}	$I_E = -10 \mu\text{A}, I_C = 0$	-5			V
Collector cutoff current	I_{CBO}	$V_{CB} = -25 \text{V}, I_E = 0$			-100	nA
		$V_{CB} = -25 \text{V}, I_E = 0, T_A = 150^\circ\text{C}$			-50	μA
Emitter cutoff current	I_{EBO}	$V_{EB} = -4 \text{V}, I_C = 0$			-100	nA
DC current gain *	KC807A-16	h_{FE} $I_C = -100 \text{mA}, V_{CE} = -1 \text{V}$	100	160	250	
	KC807A-25		160	250	400	
	KC807A-40		250	350	630	
Collector saturation voltage *	$V_{CE(sat)}$	$I_C = -500 \text{mA}, I_B = -50 \text{mA}$			-0.7	V
Base to emitter voltage *	$V_{BE(sat)}$	$I_C = -500 \text{mA}, I_B = -50 \text{mA}$			-1.2	V
Collector-base capacitance	C_{Cb}	$V_{CB} = -10 \text{V}, f = 1 \text{MHz}$		10		pF
Emitter-base capacitance	C_{eb}	$V_{EB} = -0.5 \text{V}, f = 1 \text{MHz}$		60		pF
Transition frequency	f_T	$I_C = -50 \text{mA}, V_{CE} = -5 \text{V}, f = 100 \text{MHz}$		200		MHz

* Pulsed: $PW \leq 350 \mu\text{s}$, duty cycle $\leq 2\%$

■ Marking

NO.	KC807A-16	KC807A-25	KC807A-40
Marking	5A	5B	5C