

SMD Type

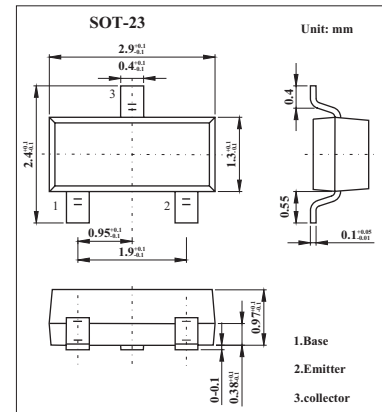
Transistors

PNP Silicon AF Transistors

KC808A(BC808A)

■ 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_{CBO}	-30	V
Collector-emitter voltage	V_{CEO}	-25	V
Emitter-base voltage	V_{EBO}	-5	V
Collector current (DC)	I_C	-500	mA
Peak collector current	I_{CM}	-1	A
Base current	I_B	-100	mA
Total power dissipation	P_{tot}	310	mW
Storage temperature	T_{stg}	-65 to +150	$^\circ\text{C}$
Junction temperature	T_j	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_{CBO}	$I_C = -10 \mu\text{A}, I_E = 0$	-30			V
Collector-to-emitter breakdown voltage	V_{CEO}	$I_C = -10 \text{ mA}, I_B = 0$	-25			V
Emitter-to-base breakdown voltage	V_{EBO}	$I_E = -10 \mu\text{A}, I_C = 0$	-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 *	KC808A-16	$I_C = -100 \text{ mA}, V_{CE} = -1 \text{ V}$	100	160	250	
	KC808A-25		160	250	400	
	KC808A-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_r	$I_C = -50 \text{ mA}, V_{CE} = -5 \text{ V}, f = 100 \text{ MHz}$		200		MHz

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

■ Marking

NO.	KC808A-16	KC808A-25	KC808A-40
Marking	5E	5F	5G