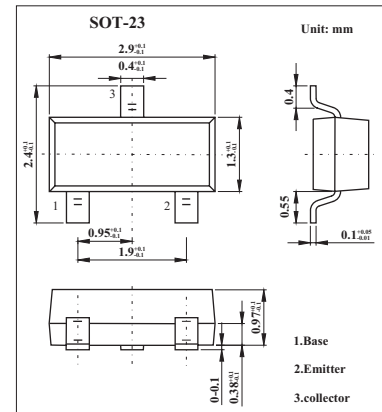


NPN Silicon AF Transistors

KC817A(BC817A)

■ 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}	50	V
Collector-emitter voltage	V _{CEO}	45	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
power dissipation	P _D	310	mW
Junction temperature	T _j	150	°C
Storage temperature	T _{stg}	-65 to +150	°C

■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Testconditions	Min	Typ	Max	Unit
Collector-to-base breakdown voltage	V _{CB0}	I _C = 10 μA, I _E = 0	50			V
Collector-to-emitter breakdown voltage	V _{CEO}	I _C = 10 mA, I _B = 0	45			V
Emitter-to-base breakdown voltage	V _{EBO}	I _E = 10 μA, I _C = 0	5			V
Collector cutoff current	I _{CB0}	V _{CB} = 25 V, I _E = 0			100	nA
		V _{CB} = 25 V, I _E = 0, T _A = 150°C			50	μA
Emitter cutoff current	I _{EBO}	V _{EB} = 4 V, I _C = 0			100	nA
DC current gain *	KC817A-16	I _C = 100 mA, V _{CE} = -1 V	100	160	250	
	KC817A-25		160	250	400	
	KC817A-40		250	350	630	
Collector saturation voltage *	V _{CE(sat)}	I _C = 500 mA, I _B = 50 mA			0.7	V
Base to emitter voltage *	V _{BE(sat)}	I _C = 500 mA, I _B = 50 mA			1.2	V
Collector-base capacitance	C _{cb}	V _{CB} = 10 V, f = 1 MHz		6		pF
Emitter-base capacitance	C _{eb}	V _{EB} = 0.5 V, f = 1 MHz		60		pF
Transition frequency	f _T	I _C = 50 mA, V _{CE} = 5 V, f = 100 MHz		170		MHz

* Pulsed: PW ≤ 350 μs, duty cycle ≤ 2%

■ Marking

NO.	KC817A-16	KC817A-25	KC817A-40
Marking	6A	6B	6C