

## SMD Type

## Transistors

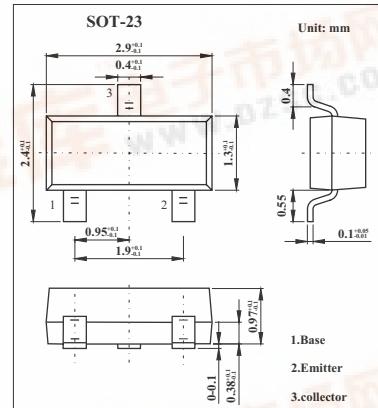
## NPN Silicon AF Transistors

### KC818(BC818)



#### ■ 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 <sub>CBO</sub>	30	V
Collector-emitter voltage	V <sub>CEO</sub>	25	V
Emitter-base voltage	V <sub>EBO</sub>	5	V
Collector current (DC)	I <sub>C</sub>	800	mA
power dissipation	P <sub>D</sub>	310	mW
Junction temperature	T <sub>j</sub>	150	°C
Storage temperature	T <sub>stg</sub>	-65 to +150	°C

#### ■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Collector-to-base breakdown voltage	V <sub>CBO</sub>	I <sub>C</sub> = 10 μA, V <sub>BE</sub> = 0	30			V
Collector-to-emitter breakdown voltage	V <sub>CEO</sub>	I <sub>C</sub> = 10 mA, I <sub>B</sub> = 0	25			V
Emitter-to-base breakdown voltage	V <sub>EBO</sub>	I <sub>E</sub> = 10 μA, I <sub>C</sub> = 0	5			V
Collector cutoff current	I <sub>CES</sub>	V <sub>CB</sub> = 25 V, V <sub>BE</sub> = 0			100	nA
Emitter cutoff current	I <sub>EBO</sub>	V <sub>EB</sub> = 4 V, I <sub>C</sub> = 0			100	nA
DC current gain *	h <sub>FE</sub>	I <sub>C</sub> = 100 mA, V <sub>CE</sub> = 1 V	100		630	
		I <sub>C</sub> = 300 mA, V <sub>CE</sub> = 1 V	60			
Collector saturation voltage *	V <sub>CE(sat)</sub>	I <sub>C</sub> = 500 mA, I <sub>B</sub> = 50 mA			0.7	V
Base emitter on voltage	V <sub>BE(on)</sub>	V <sub>CE</sub> = 1 V, I <sub>C</sub> = 300 mA			1.2	V
Output Capacitance	C <sub>ob</sub>	V <sub>CB</sub> = 10 V, f = 1 MHz			12	pF
Transition frequency	f <sub>T</sub>	I <sub>C</sub> = 10 mA, V <sub>CE</sub> = 5 V, f = 50 MHz			100	MHz

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

#### ■ Marking

NO.	KC818-16	KC818-25	KC818-40
Marking	8GA	8GB	8GC
hFE	100 ~ 250	160 ~ 400	250 ~ 630