

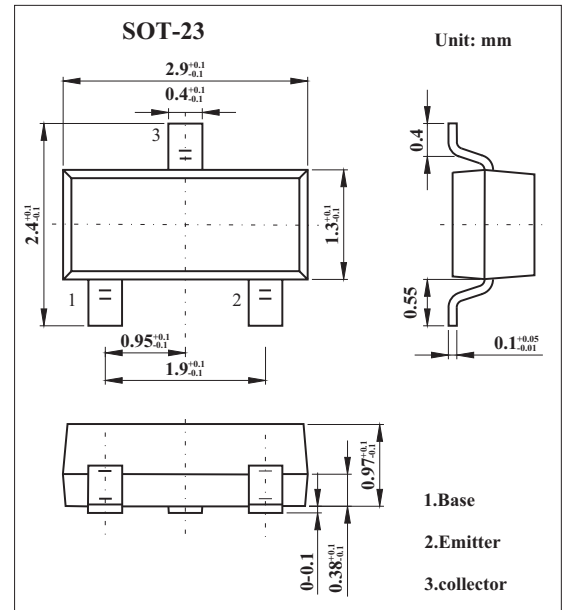
SOT-23 Plastic-Encapsulate Transistors

Features

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

MECHANICAL DATA

- Case style:SOT-23molded plastic
- Mounting position:any



MAXIMUM RATINGS AND CHARACTERISTICS

@ 25°C Ambient Temperature (unless otherwise noted)

Parameter	Symbol	Rating	Unit
Collector-base voltage	VCBO	30	V
Collector-emitter voltage	VCEO	25	V
Emitter-base voltage	VEBO	5	V
Collector current (DC)	IC	800	mA
power dissipation	Pd	310	mW
Junction temperature	Tj	150	°C
Storage temperature	Tstg	-65 to +150	°C

PACKAGE INFORMATION

Device	Package	Shipping
BC818	SOT-23	3000/Tape&Reel

Parameter	Symbol	Testconditions	Min	Typ	Max	Unit
Collector-to-base breakdown voltage	VCBO	IC = 10 μA, VBE = 0	30			V
Collector-to-emitter breakdown voltage	VCEO	IC = 10 mA, IB = 0	25			V
Emitter-to-base breakdown voltage	VEBO	IE = 10 μA, IC = 0	5			V
Collector cutoff current	ICES	VCB = 25 V, VBE = 0			100	nA
Emitter cutoff current	IEBO	VEB = 4 V, IC = 0			100	nA
DC current gain *	hFE	IC = 100 mA, VCE = 1 V	100		630	
		IC = 300 mA, VCE = 1 V	60			
Collector saturation voltage *	VCE(sat)	IC = 500 mA, IB = 50 mA			0.7	V
Base emitter on voltage	VBE(on)	VCE = 1V, IC = 300mA			1.2	V
Output Capacitance	Cob	VCB = 10V, f = 1MHz			12	pF
Transition frequency	fr	IC = 10 mA, VCE = 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