

NPN small signal transistor

BCX19

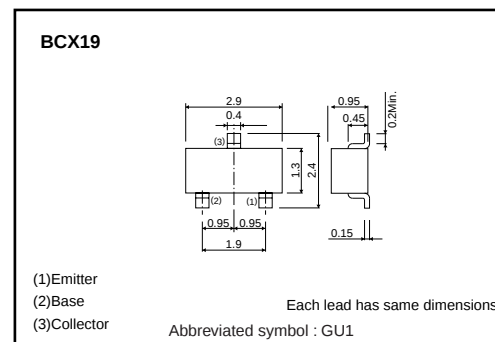
●Features

- 1) High gain and low saturation voltage.
- 2) Complements the BCX17.

●Packaging specifications

Type	Package	Taping
	Code	T116
	Basic ordering unit (pieces)	3000
BCX17		○

●Dimensions (Unit : mm)



●Absolute maximum ratings (Ta=25°C)

Parameter	Symbol	Limits	Unit
Collector-emitter voltage (V _{BE} =0)	V _{CES}	50	V
Collector-emitter voltage (open base)	V _{CEO}	45	V
Emitter-base voltage	V _{EBO}	5	V
Collector current	I _C	0.5	A
Collector current (peak value)	I _{CM}	1	A
Collector power dissipation	P _C	0.2	W
		0.35	W *
		0.425	W *2
Junction temperature	T _J	150	°C
Storage temperature	T _{stg}	-65 to 150	°C

* Mounted on a 7×5×0.6 mm CERAMIC SUBSTRATE

*2 Mounted on a 15×15×0.6 mm CERAMIC SUBSTRATE

●Electrical characteristics (Ta=25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Collector-emitter breakdown voltage	BV _{CES}	50	—	—	V	I _C = 50μA
Collector-emitter breakdown voltage	BV _{CEO}	45	—	—	V	I _C = 10mA
Emitter-base breakdown voltage	BV _{EBO}	5	—	—	V	I _E = 50μA
Collector-base cutoff current	I _{CBO}	—	—	0.1	μA	V _{CB} = 20V
Emitter-base cutoff current	I _{EBO}	—	—	10	μA	V _{EB} = 5V
Collector-emitter saturation voltage	V _{CE(sat)}	—	—	0.62	V	I _C /I _B = 500mA/ 50mA
Base-emitter voltage	V _{BE(on)}	—	—	1.2	V	V _{CE} = 1V, I _C = 500mA
DC current transfer ratio	h _{FE}	100	—	600	—	V _{CE} = 1V, I _C = 100mA
		70	—	—		V _{CE} = 1V, I _C = 300mA
		40	—	—		V _{CE} = 1V, I _C = 500mA
		—	—	—		V _{CE} = 1V, I _C = 500mA
Transition frequency	f _T	—	250	—	MHz	V _{CE} = 5V, I _E = 20mA, f=100MHz
Collector-base cutoff current	I _{CBO}	—	—	5	μA	V _{CB} = 20V, T _a =150°C

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