

NPN small signal transistor

BFS17

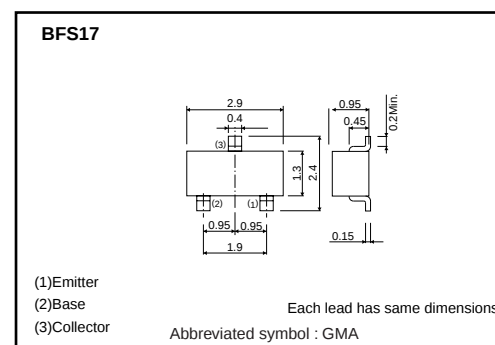
●Features

- 1) Ideal for RF applications.
- 2) Mixers and oscillations in TV tuners.
- 3) RF communications equipment.

●Packaging specifications

Type	Package	Taping
	Code	T116
	Basic ordering unit (pieces)	3000
BFS17		○

●Dimensions (Unit : mm)



●Absolute maximum ratings (Ta=25°C)

Parameter	Symbol	Limits	Unit
Collector-base voltage	V_{CBO}	25	V
Collector-emitter voltage	V_{CEO}	15	V
Emitter-base voltage	V_{EBO}	2.5	V
Collector current	I_C	0.05	A
Collector power dissipation	P_C	0.20	W
		0.25	W *
Junction temperature	T_j	150	°C
Storage temperature	T_{stg}	-55 to 150	°C

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

●Electrical characteristics (Ta=25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Collector-emitter breakdown voltage	BV_{CEO}	15	—	—	V	$I_C = 1\text{mA}$
Collector-emitter breakdown voltage	BV_{CBO}	5	—	—	V	$I_C = 50\mu\text{A}$
Emitter-base breakdown voltage	BV_{EBO}	2.5	—	—	V	$I_E = 50\mu\text{A}$
Collector-base cutoff current	I_{CBO}	—	—	0.1	μA	$V_{CB} = 10\text{V}$
DC current transfer ratio	h_{FE}	20	—	150	—	$V_{CE} = 1\text{V}, I_C = 2\text{mA}$
		20	—	—		$V_{CE} = 1\text{V}, I_C = 25\text{mA}$
Transition frequency	f_T	—	1000	—	MHz	$V_{CE} = 5\text{V}, I_C = 10\text{mA}$
Collector output capacitance	C_{ob}	—	—	1.5	pF	$V_{CB} = 10\text{V}, f = 1\text{MHz}$
Collector input capacitance	C_{ib}	—	—	2.0	pF	$V_{CB} = 0.5\text{V}, f = 1\text{MHz}$
Collector-base cutoff current	I_{CBO}	—	—	10	μA	$V_{CB} = 10\text{V}, T_a = 100^\circ\text{C}$

Notes

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