PNP small signal transistor

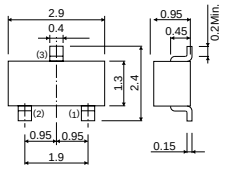
BC857B

●**Features**

1) Ideal for switching and AF amplifier applications.
2) High current gain.

●**Dimensions** (Unit : mm)

BC857B



(1)Emitter
(2)Base
(3)Collector

Each lead has same dimensions

Abbreviated symbol : G3F

●**Packaging specifications**

Type	Package	Taping
	Code	T116
	Basic ordering unit (pieces)	3000
BC857B		◯

●**Absolute maximum ratings** (Ta=25°C)

Parameter	Symbol	Limits	Unit	
Collector-base voltage	V_{CBO}	–50	V	
Collector-emitter voltage	V_{CEO}	–45	V	
Emitter-base voltage	V_{EBO}	–5	V	
Collector current	I_C	–0.1	A	
Collector power dissipation	P_C	0.20	W	
		0.35	W	✻
Junction temperature	Tj	150	°C	
Storage temperature	Tstg	–65 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}	–45	–	–	V	I_C= –1mA
Collector-base breakdown voltage	BV_{CBO}	–50	–	–	V	I_C= –50µA
Emitter-base breakdown voltage	BV_{EBO}	–5	–	–	V	I_E= –50µA
Collector-base cutoff current	I_{CBO}	–	–	–0.015	µA	V_{CB}= –30V
Collector-emitter saturation voltage	$V_{CE(sat1)}$	–	–	–0.3	V	I_C/I_B= –10mA/ –0.5mA
	$V_{CE(sat2)}$	–	–	–0.65	V	I_C/I_B= –100mA/ –5mA
Base-emitter voltage	$V_{BE(on)}$	–0.6	–	–0.75	V	V_{CE}= –5V, I_C= –10mA
DC current transfer ratio	h_{FE}	210	–	480	–	V_{CE}= 5V, I_C= –2mA
Transition frequency	f_T	–	250	–	MHz	V_{CE}= –5V, I_E= 20mA, f=100MHz
Collector outpu capacitance	Cob	–	–	4.5	pF	V_{CB}= –10V, f=1MHz
Collector-base cutoff current	I_{CBO}	–	–	–4	µA	V_{CB}= –30V

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