

PNP small signal transistor

BC857B

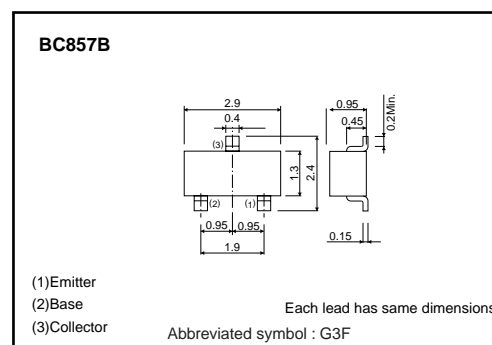
●Features

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

●Packaging specifications

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

●Dimensions (Unit : mm)



●Absolute maximum ratings (Ta=25°C)

Parameter	Symbol	Limits	Unit
Collector-base voltage	V_{CB0}	-50	V
Collector-emitter voltage	V_{CE0}	-45	V
Emitter-base voltage	V_{EB0}	-5	V
Collector current	I_c	-0.1	A
Collector power dissipation	P_c	0.20	W
		0.35	W *
Junction temperature	T_j	150	°C
Storage temperature	T_{stg}	-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_{CE0}	-45	-	-	V	$I_c = -1\text{mA}$
Collector-base breakdown voltage	BV_{CB0}	-50	-	-	V	$I_c = -50\mu\text{A}$
Emitter-base breakdown voltage	BV_{EB0}	-5	-	-	V	$I_E = -50\mu\text{A}$
Collector-base cutoff current	I_{cB0}	-	-	-0.015	μA	$V_{CB} = -30\text{V}$
Collector-emitter saturation voltage	$V_{CE(sat1)}$	-	-	-0.3	V	$I_c/I_B = -10\text{mA}/-0.5\text{mA}$
	$V_{CE(sat2)}$	-	-	-0.65	V	$I_c/I_B = -100\text{mA}/-5\text{mA}$
Base-emitter voltage	$V_{BE(on)}$	-0.6	-	-0.75	V	$V_{CE} = -5\text{V}$, $I_c = -10\text{mA}$
DC current transfer ratio	h_{FE}	210	-	480	-	$V_{CE} = 5\text{V}$, $I_c = -2\text{mA}$
Transition frequency	f_T	-	250	-	MHz	$V_{CE} = -5\text{V}$, $I_E = 20\text{mA}$, $f = 100\text{MHz}$
Collector output capacitance	C_{ob}	-	-	4.5	pF	$V_{CB} = -10\text{V}$, $f = 1\text{MHz}$
Collector-base cutoff current	I_{cB0}	-	-	-4	μA	$V_{CB} = -30\text{V}$

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