

# PNP small signal transistor

## BC857B

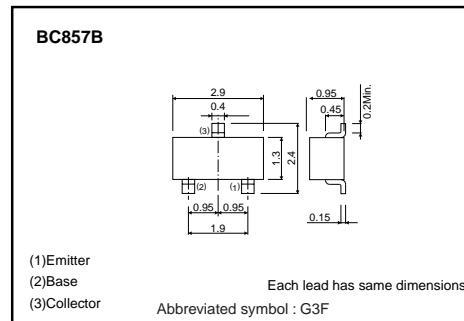
### ●Features

- 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	$\mu\text{A}$	$V_{CB} = -30\text{V}$
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	$\mu\text{A}$	$V_{CB} = -30\text{V}$

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