

PNP General Purpose Transistor

BC857B

● Features

- 1) $BV_{CEO} < -45V$ ($I_C = -1mA$)
- 2) Complements the BC847B.

● Package, marking, and packaging specifications

Part No.	BC857B
Packaging type	SST3
Marking	G3F
Code	T116
Basic ordering unit (pieces)	3000

● Absolute maximum ratings ($T_a = 25^\circ C$)

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	0.2	W *
		0.35	
Junction temperature	T_J	150	$^\circ C$
Storage temperature	T_{stg}	-55 ~ +150	$^\circ C$

* When mounted on a 7 x 5 x 0.6mm ceramic board.

● Electrical characteristics ($T_a = 25^\circ C$)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Collector-base breakdown voltage	BV_{CBO}	-50	—	—	V	$I_C = -50 \mu A$
Collector-emitter breakdown voltage	BV_{CEO}	-45	—	—	V	$I_C = -1mA$
Emitter-base breakdown voltage	BV_{EBO}	-5	—	—	V	$I_E = -50 \mu A$
Collector cutoff current	I_{CBO}	—	—	-15	nA	$V_{CB} = -30V$
		—	—	-4		$V_{CB} = -30V, T_a = 150^\circ C$
Collector-emitter saturation voltage	$V_{CE(sat)}$	—	—	-0.3	V	$I_C/I_B = -10mA/-0.5mA$
		—	—	-0.65		$I_C/I_B = -100mA/-5mA$
Base-emitter saturation voltage	$V_{BE(on)}$	-0.6	—	-0.75	V	$V_{CE}/I_C = -5V/-10mA$
DC current transfer ratio	h_{FE}	210	—	480	—	$V_{CE}/I_C = -5V/-2mA$
Transition frequency	f_T	—	250	—	MHz	$V_{CE} = -5V, I_E = 20mA, f = 100MHz$
Collector output capacitance	C_{ob}	—	4.5	—	pF	$V_{CB} = -10V, I_E = 0, f = 1MHz$

● Electrical characteristic curves

The electrical characteristic curves for these products are the same as those of BC858BW and BC858B. Refer to pages 603 to 606.

● External dimensions (Units : mm)

