

Power Transistor (120V, 1.5A)

2SC4132 / 2SD1857

●Features

- 1) High breakdown voltage. ($BV_{CEO} = 120V$)
- 2) Low collector output capacitance.
(Typ. 20pF at $V_{CB} = 10V$)
- 3) High transition frequency. ($f_T = 80MHz$)
- 4) Complements the 2SB1236.

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

Parameter	Symbol	Limits	Unit
Collector-base voltage	V_{CBO}	120	V
Collector-emitter voltage	V_{CEO}	120	V
Emitter-base voltage	V_{EBO}	5	V
Collector current	I_C	2	A
	I_{CP}	3	A ^{*1}
Collector power dissipation	P_C	0.5	W ^{*2}
		2	
		1	
Junction temperature	T_J	150	$^\circ C$
Storage temperature	T_{stg}	-55 to +150	$^\circ C$

^{*1} Single pulse $P_w = 10ms$

^{*2} When mounted on a $40 \times 40 \times 0.7mm$ ceramic board.

●Packaging specifications and h_{FE}

Type	2SC4132	2SD1857
Package	MPT3	ATV
h_{FE}	PQR	PQR
Marking	CB [*]	—
Code	T100	TV2
Basic ordering unit (pieces)	1000	2500

^{*} Denotes h_{FE}

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

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Collector-base breakdown voltage	BV_{CBO}	120	—	—	V	$I_C = 50\mu A$
Collector-emitter breakdown voltage	BV_{CEO}	120	—	—	V	$I_C = 1mA$
Emitter-base breakdown voltage	BV_{EBO}	5	—	—	V	$I_E = 50\mu A$
Collector cutoff current	I_{CBO}	—	—	1	μA	$V_{CB} = 100V$
Emitter cutoff current	I_{EBO}	—	—	1	μA	$V_{EB} = 4V$
Collector-emitter saturation voltage	$V_{CE(sat)}$	—	—	2	V	$I_C/I_B = 1A/0.1A$ [*]
DC current transfer ratio	h_{FE}	82	—	390	—	$V_{CE}/I_C = 5V/0.1A$
Transition frequency	f_T	—	80	—	MHz	$V_{CE} = 5V, I_E = -0.1A, f = 30MHz$
Output capacitance	C_{ob}	—	20	—	pF	$V_{CB} = 10V, I_E = 0A, f = 1MHz$ [*]

^{*} Measured using pulse current.

●External dimensions (Unit : mm)

