

Power Transistor (120V, 1.5A)

2SC4132 / 2SD1857 / 2SD2343

! 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_{CB0}	120	V
Collector-emitter voltage	V_{CE0}	120	V
Emitter-base voltage	V_{EB0}	5	V
Collector current	I_C	2	A
	I_{CP}	3	A
Collector power dissipation	P_C	0.5	W
		2	W
		1	W
		1.5	W
Junction temperature	T_J	150	$^\circ C$
Storage temperature	T_{stg}	-55~+150	$^\circ C$

*1 Single pulse $P_w = 10ms$

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

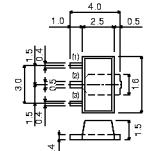
! Packaging specifications and h_{FE}

Type	2SC4132	2SD1857	2SD2343
Package	MPT3	ATV	TO-126FP
h_{FE}	PQR	PQR	PQ
Marking	CB*	—	—
Code	T100	TV2	—
Basic ordering unit (pieces)	1000	2500	1000

* Denotes h_{FE}

! External dimensions (Units : mm)

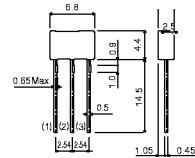
2SC4132



ROHM : MPT3
EIAJ : SC-62

- (1) Base(Gate)
(2) Collector(Drain)
(3) Emitter(Source)

2SD1857

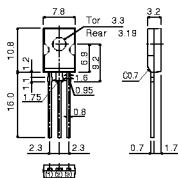


Taping specifications

ROHM : ATV

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

2SD2343



ROHM : TO-126FP

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

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

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Collector-base breakdown voltage	BV_{CB0}	120	—	—	V	$I_C = 50\mu A$
Collector-emitter breakdown voltage	BV_{CE0}	120	—	—	V	$I_C = 1mA$
Emitter-base breakdown voltage	BV_{EB0}	5	—	—	V	$I_E = 50\mu A$
Collector cutoff current	I_{C0}	—	—	1	μA	$V_{CB} = 100V$
Emitter cutoff current	I_{E0}	—	—	1	μA	$V_{EB} = 4V$
Collector-emitter saturation voltage	$V_{CE(sat)}$	—	—	0.4	V	$I_C/I_E = 1A/0.1A$
DC current transfer ratio	h_{FE}	82	—	390	—	$V_{CE}/I_C = 5V/0.1A$
		82	—	270	—	
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.