

Power Transistor (−160V , −1.5A)

2SB1275 / 2SB1236A

●Features

- 1) High breakdown voltage.($BV_{CEO} = -160V$)
- 2) Low collector output capacitance.
(Typ. 30pF at $V_{CB} = 10V$)
- 3) High transition frequency.($f_T = 50MHz$)
- 4) Complements the 2SD1918 / 2SD1857A.

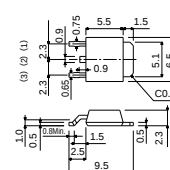
●Absolute maximum ratings ($T_a = 25^\circ C$)

Parameter	Symbol	Limits	Unit
Collector-base voltage	V_{CBO}	−160	V
Collector-emitter voltage	V_{CEO}	−160	V
Emitter-base voltage	V_{EBO}	−5	V
Collector current	I_C	−1.5 −3	A(DC) A(Pulse) *1
Collector power dissipation	P_C	1 10	W($T_c = 25^\circ C$)
		1	W *2
Junction temperature	T_J	150	$^\circ C$
Storage temperature	T_{stg}	−55+150	$^\circ C$

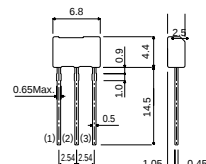
* 1 Single pulse $P_w = 100ms$ * 2 Printed circuit board 1.7mm thick, collector plating $1cm^2$ or larger.

●External dimensions (Units : mm)

2SB1275

ROHM : CPT3
EIAJ : SC-63(1) Base(Gate)
(2) Collector(Drain)
(3) Emitter(Source)

2SB1236A



ROHM : ATV

Taping specifications

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

●Packaging specifications and h_{FE}

Type	2SB1275	2SB1236A
Package	CPT3	ATV
h_{FE}	NP	PQ
Code	TL	TV2
Basic ordering unit (pieces)	2500	2500

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

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Collector-base breakdown voltage	BV_{CBO}	−160	—	—	V	$I_C = -50\mu A$
Collector-emitter breakdown voltage	BV_{CEO}	−160	—	—	V	$I_C = -1mA$
Emitter-base breakdown voltage	BV_{EBO}	−5	—	—	V	$I_E = -50\mu A$
Collector cutoff current	I_{CBO}	—	—	−1	μA	$V_{CB} = -120V$
Emitter cutoff current	I_{EBO}	—	—	−1	μA	$V_{EB} = -4V$
Collector-emitter saturation voltage	$V_{CE(sat)}$	—	—	−2	V	$I_C/I_B = -1A/-0.1A$ *
Base-emitter saturation voltage	$V_{BE(sat)}$	—	—	−1.5	V	$I_C/I_B = -1A/-0.1A$ *
DC current transfer ratio	h_{FE}	56	—	180	—	$V_{CE} = -5V, I_C = -0.1A$
		82	—	270	—	
Transition frequency	f_T	—	50	—	MHz	$V_{CE} = -5V, I_E = 0.1A, f = 30MHz$
Output capacitance	C_{ob}	—	30	—	pF	$V_{CB} = -10V, I_E = 0A, f = 1MHz$

*Measured using pulse current.