

Transistors

Power Transistor (−80V, −7A)

2SB1672

●Features

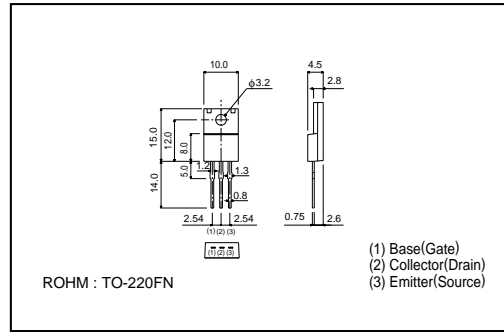
- 1) Low saturation voltage.
(Typ. $V_{CE(sat)} = -0.3V$ at $I_c / I_b = -4A / -0.4A$)
- 2) Excellent DC current gain characteristics.
- 3) $P_c = 30W$ ($T_c = 25^\circ C$).
- 4) Wide SOA (safe operating area).
- 5) Complements the 2SD2611.

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

Parameter	Symbol	Limits	Unit
Collector-base voltage	V_{CBO}	−80	V
Collector-emitter voltage	V_{CEO}	−80	V
Emitter-base voltage	V_{EBO}	−5	V
Collector current	I_c	−7	A(DC)
		−10	A(Pulse) *
Collector power dissipation	P_c	2	W
		30	W($T_c = 25^\circ C$)
Junction temperature	T_j	150	$^\circ C$
Storage temperature	T_{stg}	−55 ~ +150	$^\circ C$

* Single pulse, $P_w = 100ms$

●External dimensions (Units : mm)



●Packaging specifications and h_{FE}

Type	2SB1672
Package	TO-220FN
h_{FE}	EF
Code	—
Basic ordering unit (pieces)	500

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

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Collector-base breakdown voltage	BV_{CBO}	−80	—	—	V	$I_c = -50\mu A$
Collector-emitter breakdown voltage	BV_{CEO}	−80	—	—	V	$I_c = -1mA$
Emitter-base breakdown voltage	BV_{EBO}	−5	—	—	V	$I_E = -50\mu A$
Collector cutoff current	I_{CBO}	—	—	−10	μA	$V_{CB} = -80V$
Emitter cutoff current	I_{EBO}	—	—	−10	μA	$V_{EB} = -4V$
Collector-emitter saturation voltage	$V_{CE(sat)}$	—	—	−1	V	$I_c / I_b = -4A / -0.4A$ *
Base-emitter saturation voltage	$V_{BE(sat)}$	—	—	−1.5	V	$I_c / I_b = -4A / -0.4A$ *
DC current transfer ratio	h_{FE}	100	—	320	—	$V_{CE} / I_c = -5V / -1A$
Transition frequency	f_T	—	12	—	MHz	$V_{CE} = -5V, I_E = 0.5A, f = 5MHz$
Output capacitance	C_{ob}	—	200	—	pF	$V_{CB} = -10V, I_E = 0A, f = 1MHz$

* Measured using pulse current