

Power Transistor (–80V, –7A)

2SB1672

●Features

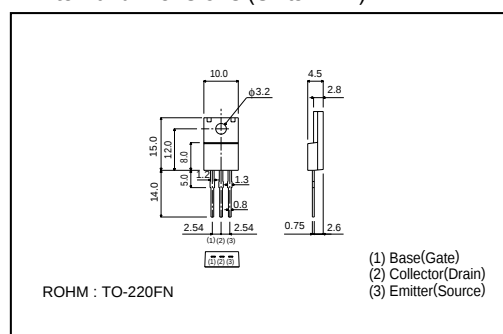
- 1) Low saturation voltage.
(Typ. $V_{CE(sat)} = -0.3V$ at $I_C / I_E = -4A / -0.4A$)
- 2) Excellent DC current gain characteristics.
- 3) $P_C = 30W$ ($T_C = 25^\circ C$).
- 4) Wide SOA (safe operating area).
- 5) Complements the 2SD2611.

●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	$I_C / I_E = -4A / -0.4A$ *
Base-emitter saturation voltage	$V_{BE(sat)}$	–	–	–1.5	V	$I_C / I_E = -4A / -0.4A$ *
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