

Power Transistor (−120V, −6A)

2SB1674

●Features

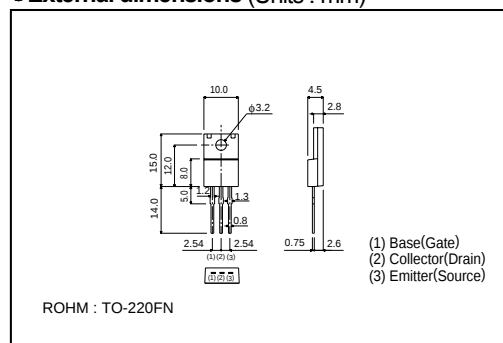
- 1) Darlington connection for high DC current gain.
- 2) Built-in resistor between base and emitter.
- 3) Built-in damper diode.
- 4) Complements the 2SD2615.

●Absolute maximum ratings (Ta=25°C)

Parameter	Symbol	Limits	Unit
Collector-base voltage	V _{CB0}	−120	V
Collector-emitter voltage	V _{CE0}	−120	V
Emitter-base voltage	V _{EB0}	−6	V
Collector current	I _C	−6	A(DC)
		−10	A(Pulse) *
Collector power dissipation	P _C	2	W
		30	W(T _C =25°C)
Junction temperature	T _J	150	°C
Storage temperature	T _{stg}	−55~+150	°C

* Single pulse, P_w=10ms

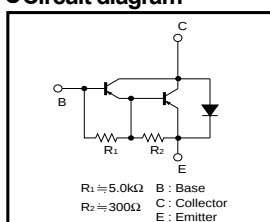
●External dimensions (Units : mm)



●Packaging specifications and h_{FE}

Type	2SB1674
Package	TO-220FN
h _{FE}	2k~20k
Code	-
Basic ordering unit (pieces)	500

●Circuit diagram



●Electrical characteristics (Ta=25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Collector-base breakdown voltage	BV _{CB0}	−120	-	-	V	I _C =−50μA
Collector-emitter breakdown voltage	BV _{CE0}	−120	-	-	V	I _C =−5mA
Collector cutoff current	I _{CB0}	-	-	−100	μA	V _{CB} =−120V
Emitter cutoff current	I _{EB0}	-	-	−3	mA	V _{EB} =−5V
Collector-emitter saturation voltage	V _{CE(sat)}	-	-	−1.5	V	I _C /I _B =−3A/−6mA
DC current transfer ratio	h _{FE}	2k	-	20k	-	V _{CE} /I _C =−3V/−2A
Transition frequency	f _T	-	12	-	MHz	V _{CE} =−5V, I _E =0.5A, f=10MHz
Output capacitance	C _{ob}	-	70	-	pF	V _{CE} =−10V, I _E =0A, f=1MHz

*1 Measured using pulse current.

*2 Transition frequency of the device.