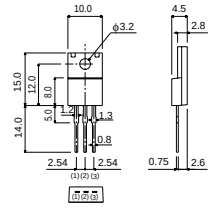
Power Transistor (–120V, –6A)

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.

●External dimensions (Units : mm)



ROHM : TO-220FN

●Absolute maximum ratings (Ta=25°C)

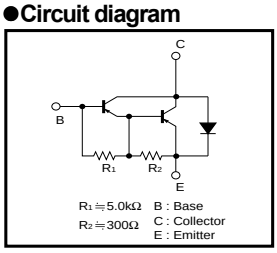
Parameter	Symbol	Limits	Unit
Collector-base voltage	V_{CBO}	-120	V
Collector-emitter voltage	V_{CES}	-120	V
Emitter-base voltage	V_{EBO}	-6	V
Collector current	I_C	-6	A(DC)
		-10	A(Pulse) *
Collector power dissipation	P_C	2	W
		30	W(Tc=25˚C)
Junction temperature	Tj	150	˚C
Storage temperature	Tstg	-55~+150	˚C

* Single pulse, P_W=10ms

●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_{CBO}	-120	-	-	V	I_C=-50μA	
Collector-emitter breakdown voltage	BV_{CEO}	-120	-	-	V	I_C=-5mA	
Collector cutoff current	I_{CBO}	-	-	-100	μA	V_{CB}=-120V	
Emitter cutoff current	I_{EBO}	-	-	-3	mA	V_{EB}=-5V	
Collector-emitter saturation voltage	$V_{CE(sat)}$	-	-	-1.5	V	I_C/I_B=-3A/-6mA	*1
DC current transfer ratio	h_{FE}	2k	-	20k	-	V_{CE}/I_C=-3V/-2A	*1
Transition frequency	f_T	-	12	-	MHz	V_{CE}=-5V , I_E=0.5A , f=10MHz	*2
Output capacitance	Cob	-	70	-	pF	V_{CB}=-10V , I_E=0A , f=1MHz	

*1 Measured using pulse current. *2 Transition frequency of the device.