

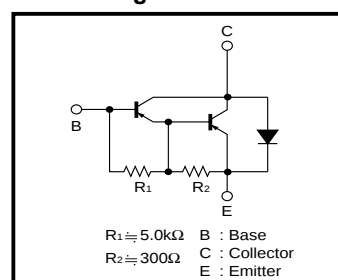
Power Transistor (120V, 6A)

2SD2615

●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 2SB1674.

●Circuit diagram



●Absolute maximum ratings (Ta = 25°C)

Parameter	Symbol	Limits	Unit
Collector-base voltage	V_{CBO}	120	V
Collector-emitter voltage	V_{CEO}	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	T_j	150	°C
Storage temperature	T_{stg}	-55 ~ +150	°C

* Single pulse, Pw=100ms

●Packaging specifications and hFE

Type	2SD2615
Package	TO-220FN
hFE	2K~20K
Code	—
Basic ordering unit (pieces)	500

●Electrical characteristics (Ta = 25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Collector-base breakdown voltage	BV_{CBO}	120	—	—	V	$I_C = 50\mu A$
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	hFE	2K	—	20K	—	$V_{CE}/I_C = 3V/2A$ *1
Transition frequency	f _r	—	40	—	MHz	$V_{CE} = 5V$, $I_E = -0.2A$, $f = 10MHz$ *2
Output capacitance	Cob	—	50	—	pF	$V_{CB} = 10V$, $I_E = 0A$, $f = 1MHz$

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