

2SD1771, 2SD1771A

Silicon NPN triple diffusion planar type

For power amplification

For TV vertical deflection output

Complementary to 2SB1191 and 2SB1191A

Features

- High collector to emitter V_{CEO}
- Large collector power dissipation P_C
- N type package enabling direct soldering of the radiating fin to the printed circuit board, etc. of small electronic equipment.

Absolute Maximum Ratings ($T_C=25^\circ C$)

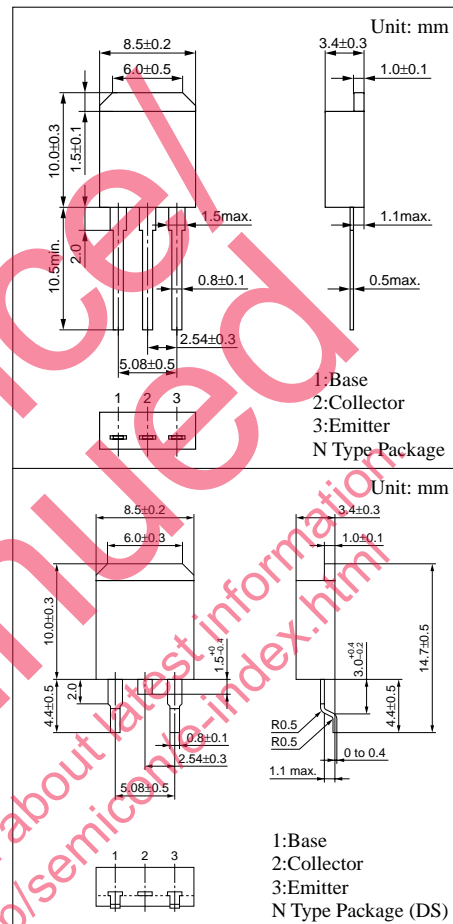
Parameter	Symbol	Ratings	Unit
Collector to base voltage	V_{CB0}	200	V
Collector to emitter voltage	V_{CEO}	150	V
Emitter to base voltage	V_{EBO}	6	V
Peak collector current	I_{CP}	2	A
Collector current	I_C	1	A
Collector power dissipation	P_C	25	W
Junction temperature	T_j	150	$^\circ C$
Storage temperature	T_{stg}	-55 to +150	$^\circ C$

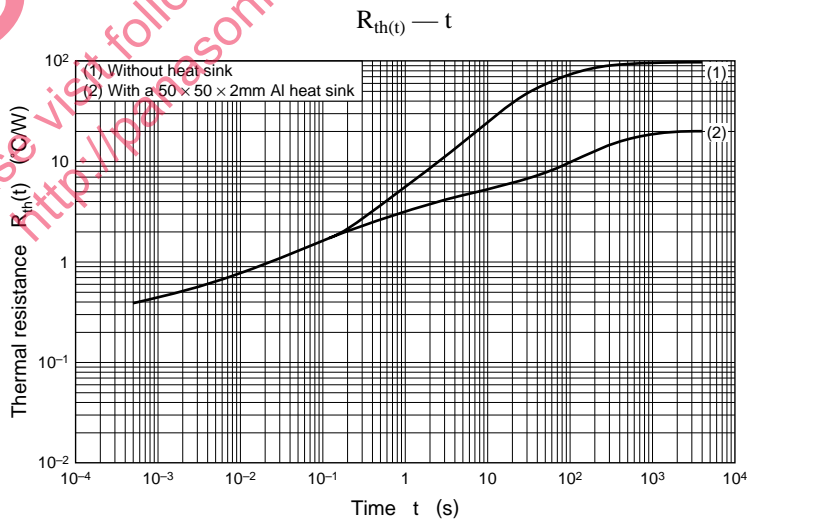
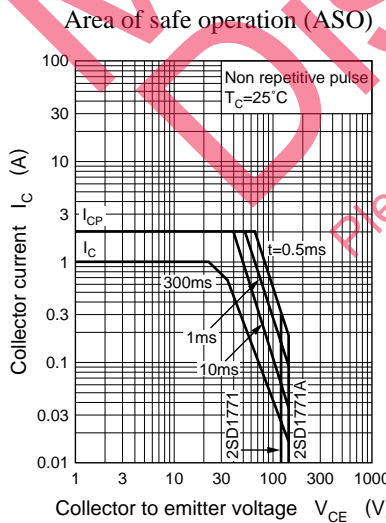
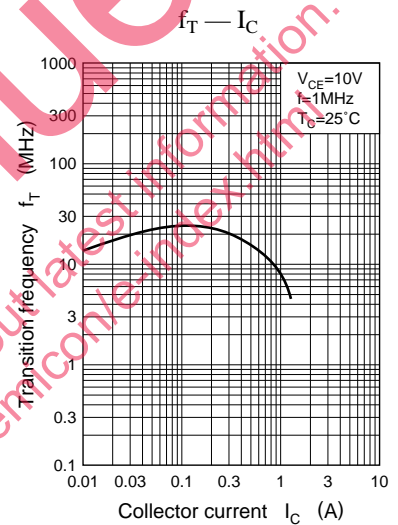
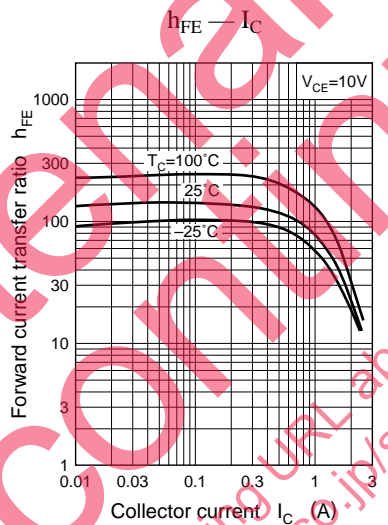
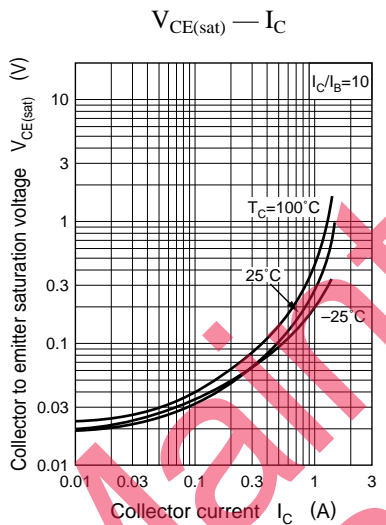
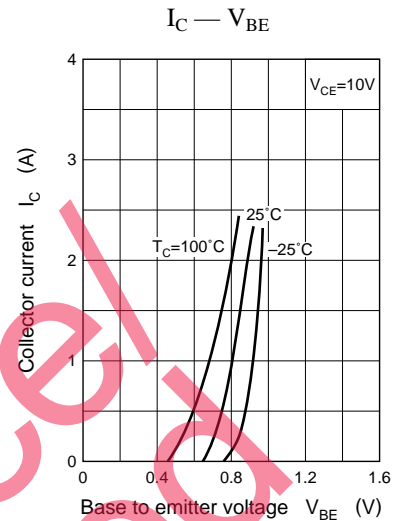
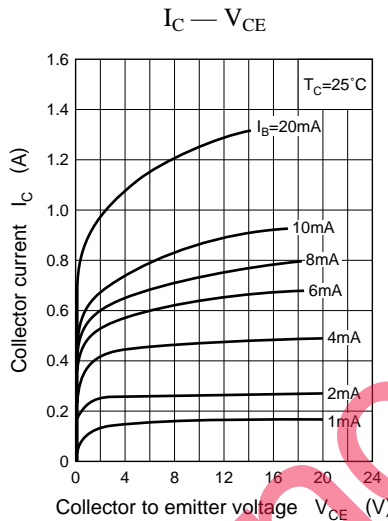
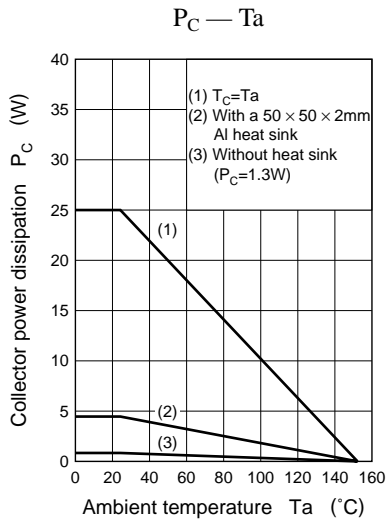
Electrical Characteristics ($T_C=25^\circ C$)

Parameter	Symbol	Conditions	min	typ	max	Unit
Collector cutoff current	I_{CBO}	$V_{CB} = 200V, I_E = 0$			50	μA
Emitter cutoff current	I_{EBO}	$V_{EB} = 4V, I_C = 0$			50	μA
Collector to emitter voltage	V_{CEO}	$I_C = 5mA, I_B = 0$	150			V
Emitter to base voltage	V_{EBO}	$I_E = 0.5mA, I_C = 0$	6			V
Forward current transfer ratio	h_{FE1}	$V_{CE} = 10V, I_C = 100mA$	60		240	
	h_{FE2}	$V_{CE} = 10V, I_C = 300mA$	50			
Base to emitter voltage	V_{BE}	$V_{CE} = 10V, I_C = 300mA$			1	V
Collector to emitter saturation voltage	$V_{CE(sat)}$	$I_C = 500mA, I_B = 50mA$			1	V
Transition frequency	f_T	$V_{CE} = 10V, I_C = 100mA, f = 1MHz$		20		MHz
Collector output capacitance	C_{ob}	$V_{CB} = 10V, I_E = 0, f = 1MHz$		27		pF

* h_{FE1} Rank classification

Rank	Q	P
h_{FE1}	60 to 140	100 to 240





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