

2SD1772, 2SD1772A

Silicon NPN triple diffusion planar type

For power amplification

For TV vertical deflection output

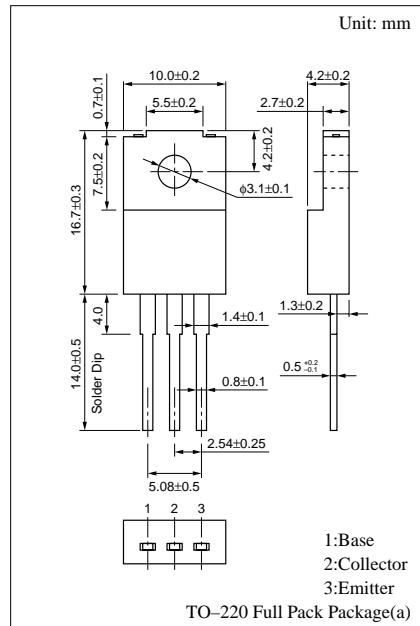
Complementary to 2SB1192 and 2SB1192A

■ Features

- Large collector power dissipation P_C
- Full-pack package which can be installed to the heat sink with one screw

Absolute Maximum Ratings (T_C=25°C)

Parameter		Symbol	Ratings	Unit
Collector to base voltage	2SD1772 2SD1772A	V_{CBO}	200	V
Collector to emitter voltage	2SD1772 2SD1772A		200	
Emitter to base voltage		V_{CEO}	150	V
Peak collector current			180	
Collector current		V_{EBO}	6	V
Collector power dissipation	$T_C=25^\circ C$ $T_a=25^\circ C$	I_{CP}	2	A
Junction temperature			1	
Storage temperature		T_j	150	$^\circ C$
		T_{stg}	-55 to +150	$^\circ C$

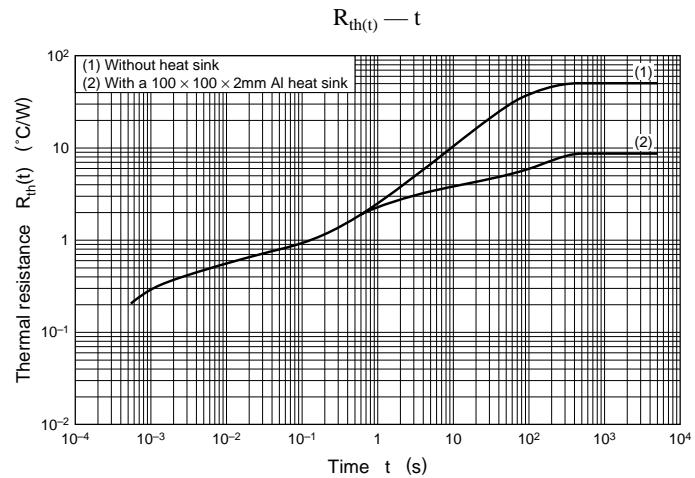
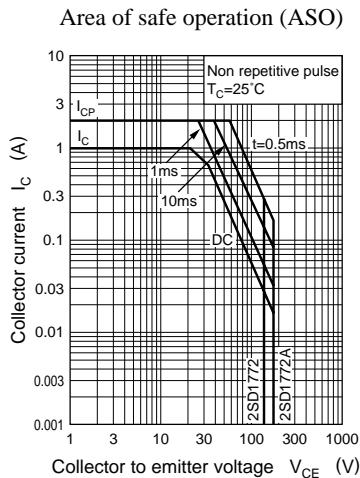
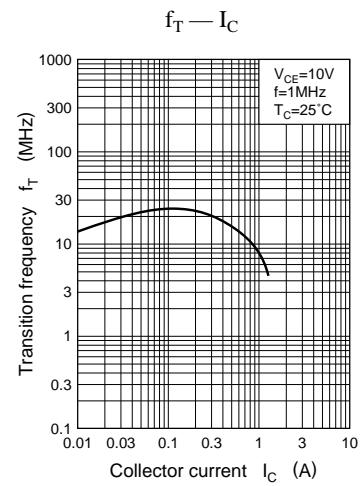
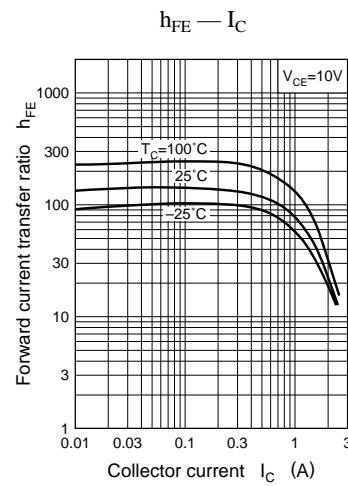
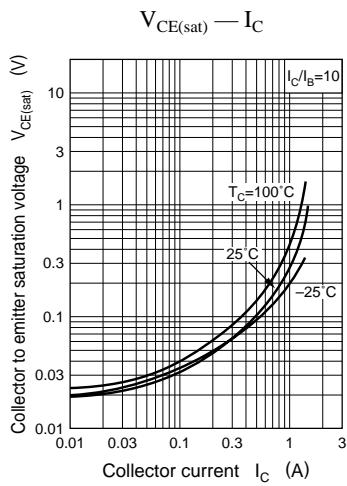
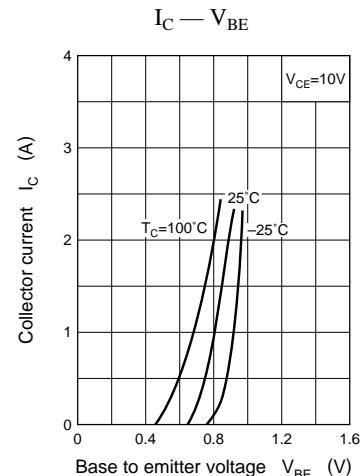
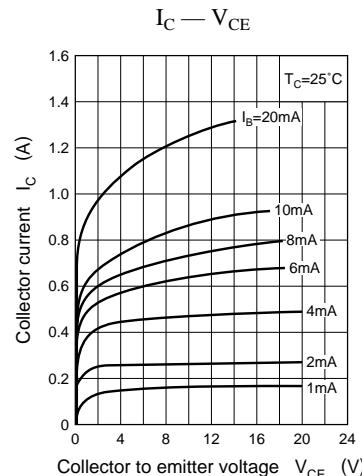
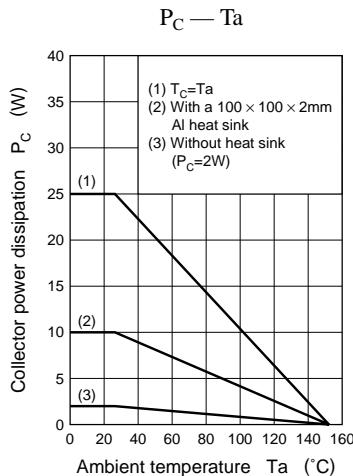


■ Electrical Characteristics ($T_C=25^\circ\text{C}$)

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	2SD1772	V_{CEO}	$I_C = 5mA, I_B = 0$	150			V
	2SD1772A			180			
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_{FE}] Rank classification

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



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