

2SD2341

Silicon NPN triple diffusion planar type

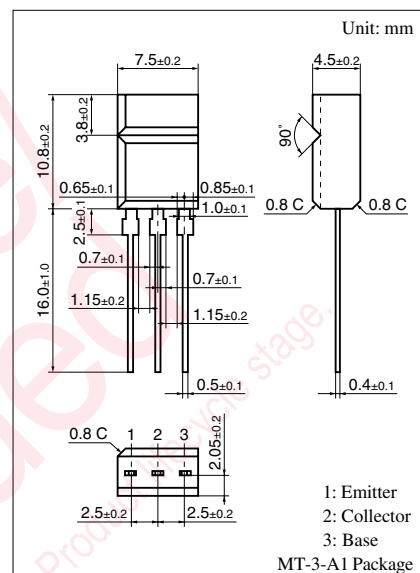
For power amplification

■ Features

- Low collector to emitter saturation voltage $V_{CE(sat)}$
- High collector to emitter voltage V_{CEO}
- Allowing automatic insertion possible with radial tapping

■ Absolute Maximum Ratings $T_C = 25^\circ\text{C}$

Parameter	Symbol	Rating	Unit
Collector to base voltage	V_{CBO}	200	V
Collector to emitter voltage	V_{CEO}	180	V
Emitter to base voltage	V_{EBO}	6	V
Peak collector current	I_{CP}	3	A
Collector current	I_C	2	A
Collector power dissipation	P_C	1.5	W
Junction temperature	T_j	150	$^\circ\text{C}$
Storage temperature	T_{stg}	-55 to +150	$^\circ\text{C}$

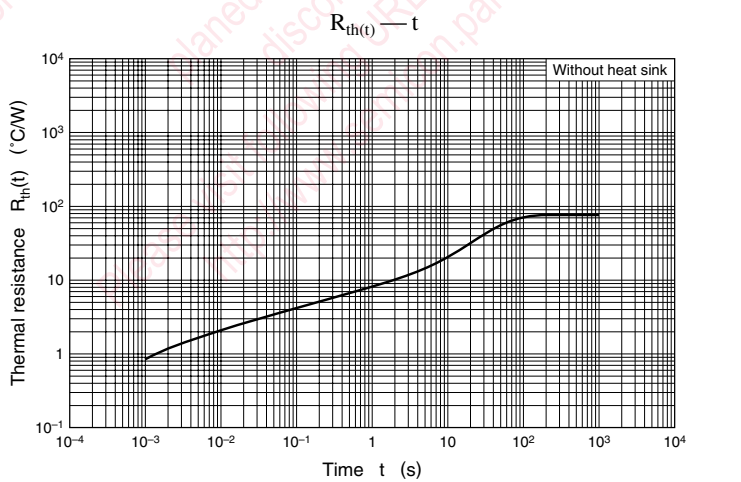
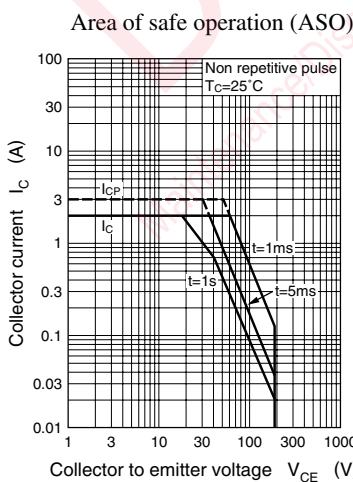
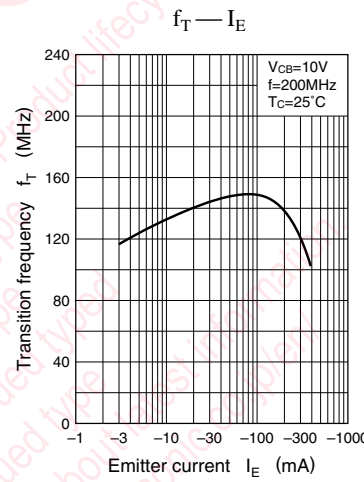
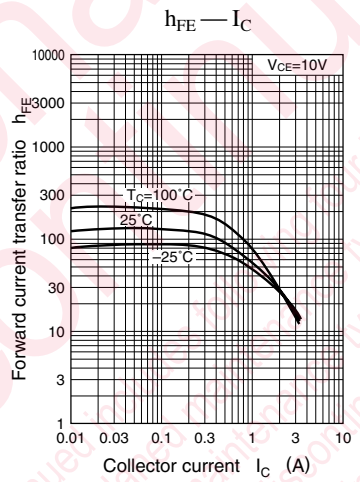
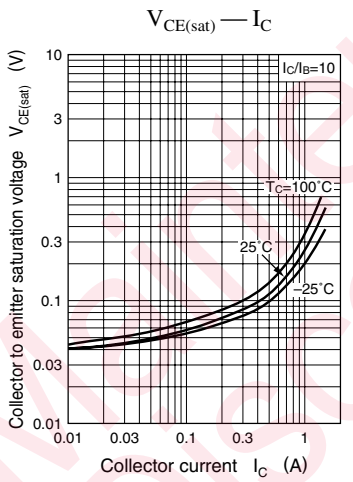
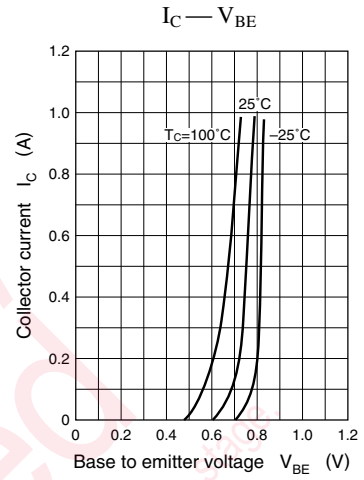
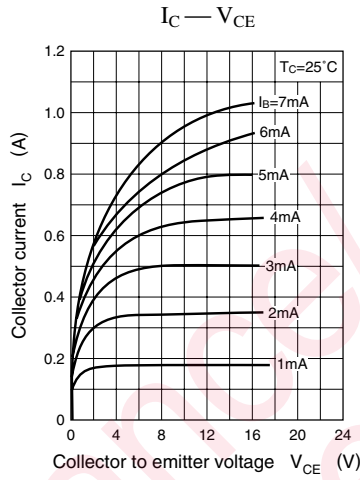
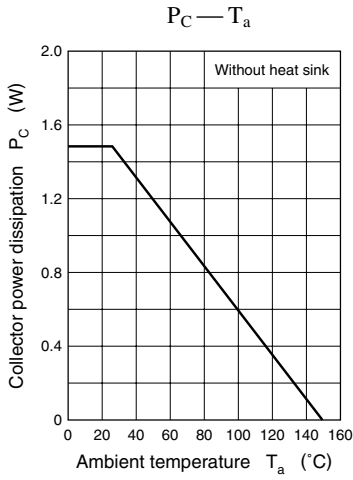


■ Electrical Characteristics $T_C = 25^\circ\text{C}$

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Collector cutoff current	I_{CBO}	$V_{CB} = 200\text{ V}, I_E = 0$			50	μA
Emitter cutoff current	I_{EBO}	$V_{EB} = 4\text{ V}, I_C = 0$			50	μA
Collector to base voltage	V_{CBO}	$I_C = 500\ \mu\text{A}, I_E = 0$	200			V
Collector to emitter voltage	V_{CEO}	$I_C = 5\text{ mA}, I_B = 0$	180			V
Emitter to base voltage	V_{EBO}	$I_E = 500\ \mu\text{A}, I_C = 0$	6			V
Forward current transfer ratio	h_{FE1} *	$V_{CE} = 10\text{ V}, I_C = 150\text{ mA}$	60		240	
	h_{FE2}	$V_{CE} = 10\text{ V}, I_C = 400\text{ mA}$	50			
Base to emitter voltage	V_{BE}	$V_{CE} = 10\text{ V}, I_C = 400\text{ mA}$		1		V
Collector to emitter saturation voltage	$V_{CE(sat)}$	$I_C = 500\text{ mA}, I_B = 50\text{ mA}$		1		V
Transition frequency	f_T	$V_{CB} = 10\text{ V}, I_C = -100\text{ mA}, f = 200\text{ MHz}$		150		MHz

Note) *: Rank classification

Rank	R	S
h_{FE1}	60 to 140	100 to 240



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