

2SD1741, 2SD1741A

Silicon NPN triple diffusion planar type

For power amplification

For TV vertical deflection output

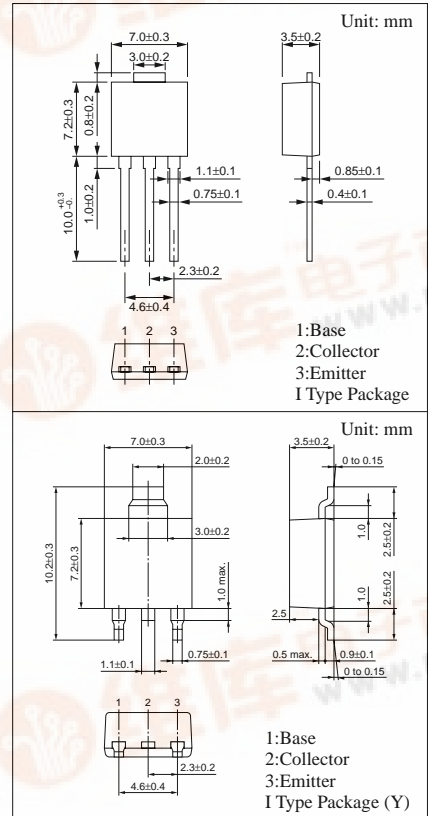
Complementary to 2SB1171 and 2SB1171A

Features

- High forward current transfer ratio h_{FE} which has satisfactory linearity
- Low collector to emitter saturation voltage $V_{CE(sat)}$
- I type package enabling direct soldering of the radiating fin to the printed circuit board, etc. of small electronic equipment.

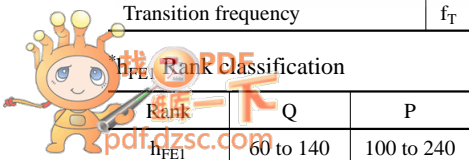
Absolute Maximum Ratings ($T_C=25^\circ C$)

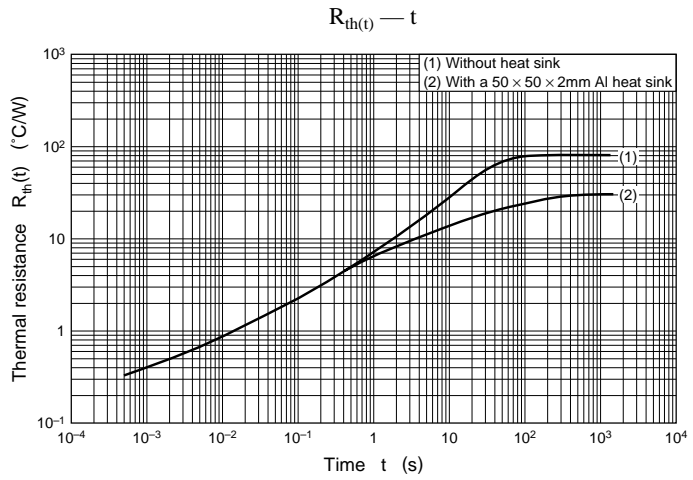
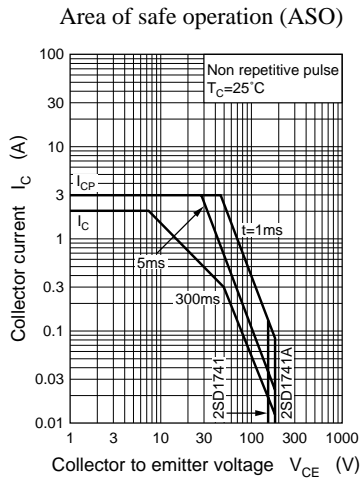
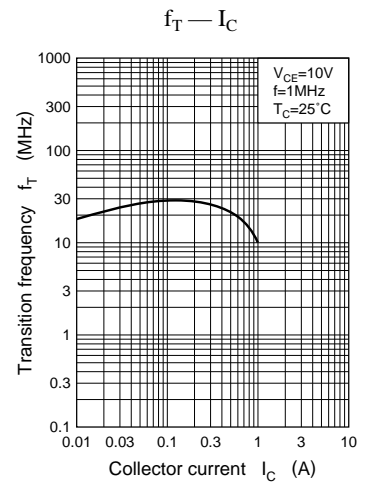
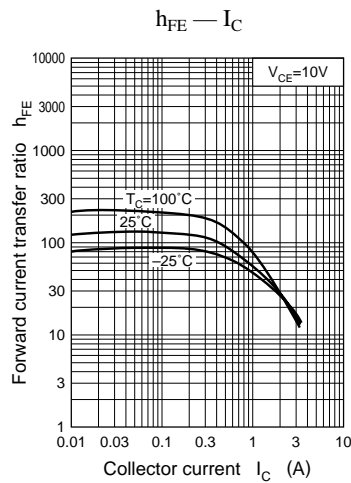
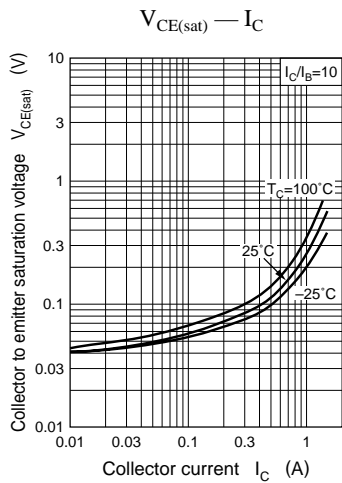
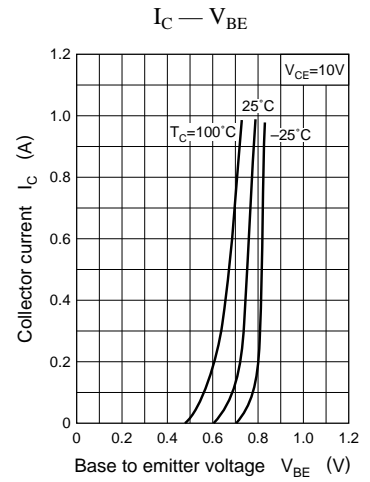
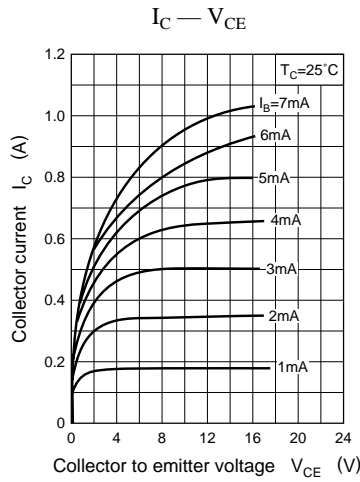
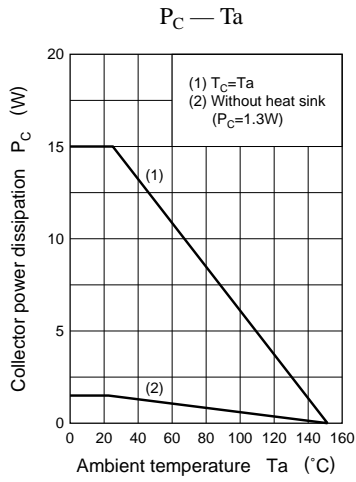
Parameter	Symbol	Ratings	Unit	
Collector to base voltage	V_{CBO}	2SD1741	200	V
2SD1741A		200		
Collector to emitter voltage	V_{CEO}	2SD1741	150	V
2SD1741A		180		
Emitter to base voltage	V_{EBO}	6	V	
Peak collector current	I_{CP}	3	A	
Collector current	I_C	2	A	
Collector power dissipation	P_C	$T_C=25^\circ C$	15	W
$T_a=25^\circ C$		1.3		
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 base voltage	V_{CBO}	$I_C = 50\mu A, I_E = 0$	200			V
Collector to emitter voltage	V_{CEO}	$I_C = 5mA, I_B = 0$	2SD1741	150		V
2SD1741A			180			
Emitter to base voltage	V_{EBO}	$I_E = 500\mu A, I_C = 0$	6			V
Forward current transfer ratio	h_{FE1}^*	$V_{CE} = 10V, I_C = 150mA$	60		240	
	h_{FE2}	$V_{CE} = 10V, I_C = 400mA$	50			
Base to emitter voltage	V_{BE}	$V_{CE} = 10V, I_C = 400mA$			1	V
Collector to emitter saturation voltage	$V_{CE(sat)}$	$I_C = 500mA, I_B = 50mA$			1	V
Transition frequency	f_T	$V_{CE} = 10V, I_C = 0.5A, f = 1MHz$		20		MHz





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