

2SB1171, 2SB1171A

Silicon PNP Epitaxial Planar Type

Power Amplifier
TV Vertical Deflection Output
Complementary Pair with 2SD1718

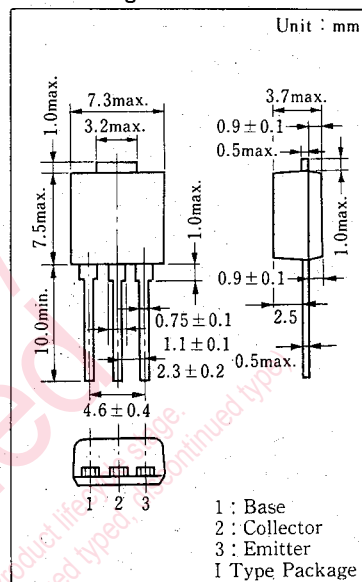
■ Features

- High collector-emitter voltage (V_{CE0})
- Large collector power dissipation (P_C)
- "I Type" package configuration with a cooling fin for direct soldering on PC board of a small-size electronic equipment

■ Absolute Maximum Ratings ($T_c=25^\circ\text{C}$)

Item	Symbol	Value	Unit
Collector-base voltage	2SB1171	-200	V
	2SB1171A	-200	
Collector-emitter voltage	2SB1171	-150	V
	2SB1171A	-180	
Emitter-base voltage	V_{EBO}	-6	V
Peak collector current	I_{CP}	-3	A
Collector current	I_C	-2	A
Collector power dissipation	$T_c=25^\circ\text{C}$	15	W
	$T_a=25^\circ\text{C}$	1.3	
Junction temperature	T_j	150	$^\circ\text{C}$
Storage temperature	T_{stg}	-55 ~ +150	$^\circ\text{C}$

■ Package Dimensions



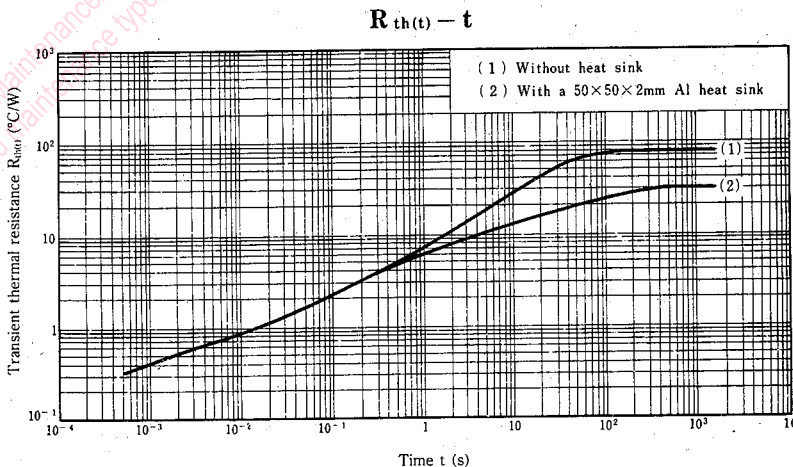
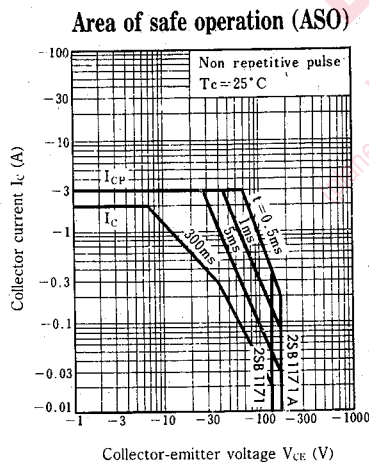
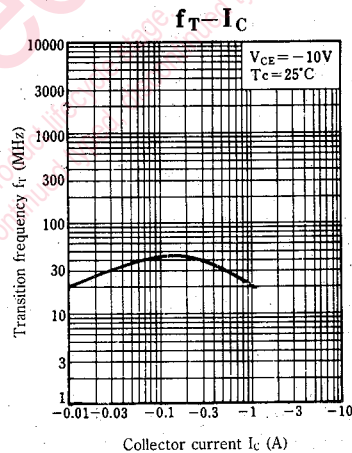
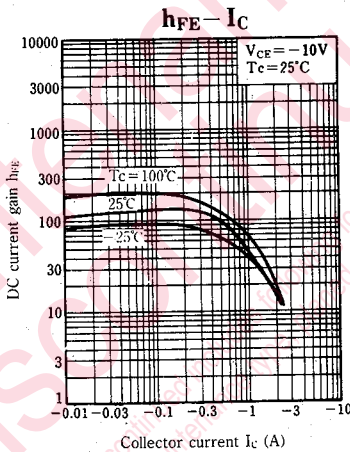
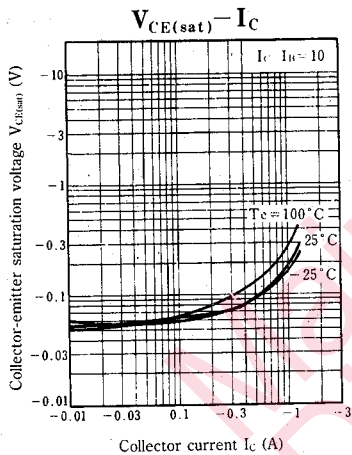
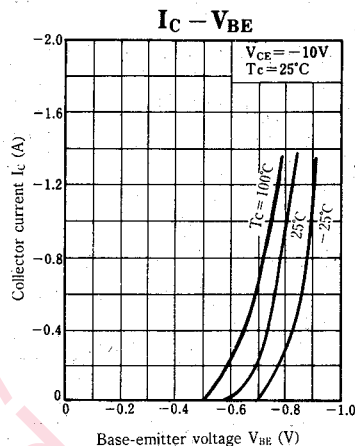
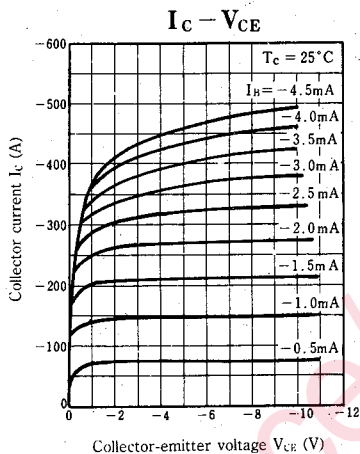
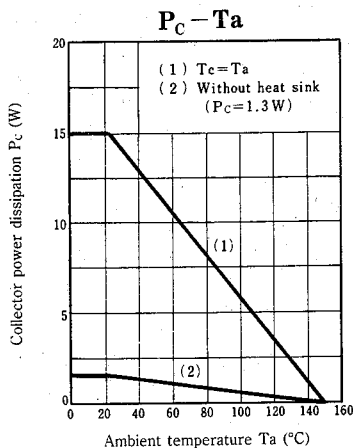
*Surface-mount type is also available.
(Refer to p.81.)

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

Item	Symbol	Condition	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-base voltage	V_{CBO}	$I_C = -500\ \mu\text{A}, I_E = 0$	-200			V
Collector-emitter voltage	2SB1171	$I_C = -5\text{ mA}, I_E = 0$	-150			V
	2SB1171A		-180			
Emitter-base voltage	V_{EBO}	$I_E = -500\ \mu\text{A}, I_C = 0$	-6			V
DC current gain	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-emitter voltage	V_{BE}	$V_{CE} = -10\text{ V}, I_C = -400\text{ mA}$			-1	V
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -500\text{ mA}, I_B = -50\text{ mA}$			-1	V
Transition frequency	f_T	$V_{CE} = -10\text{ V}, I_C = -0.5\text{ A}, f = 10\text{ MHz}$		40		MHz

* h_{FE1} Classifications

Class	Q	P
h_{FE1}	60 ~ 140	100 ~ 240



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