

# 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	$^\circ\text{C}$

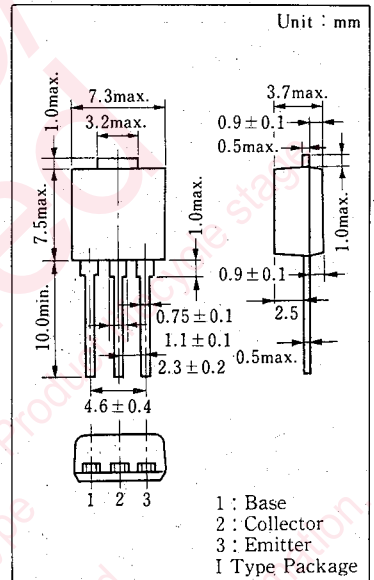
### ■ Electrical Characteristics ( $T_c=25^\circ\text{C}$ )

Item	Symbol	Condition	min.	typ.	max.	Unit
Collector cutoff current	$I_{CBO}$	$V_{CB} = -200\text{ V}, I_E = 0$			-50	$\mu\text{A}$
Emitter cutoff current	$I_{EBO}$	$V_{EB} = -4\text{ V}, I_C = 0$			-50	$\mu\text{A}$
Collector-base voltage	$V_{CBO}$	$I_C = -500\ \mu\text{A}, I_E = 0$	-200			V
Collector-emitter voltage	$V_{CEO}$	$I_C = -5\text{ mA}, I_E = 0$	-150			V
			-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

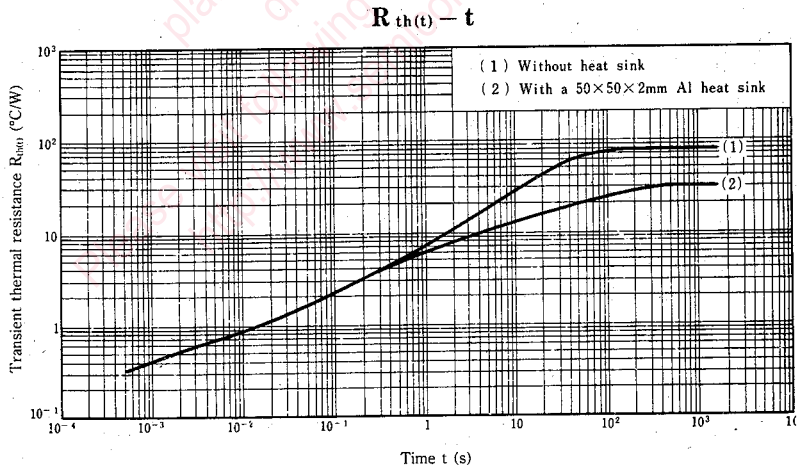
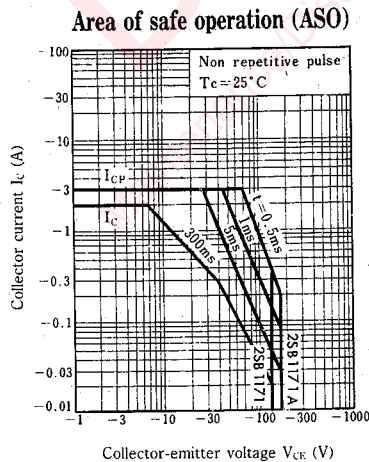
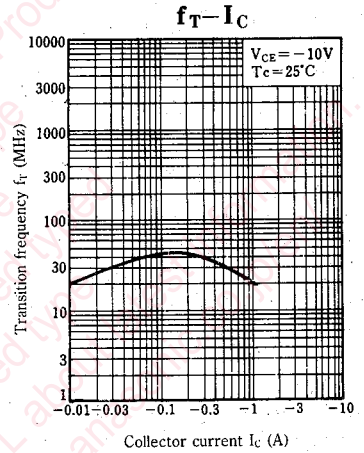
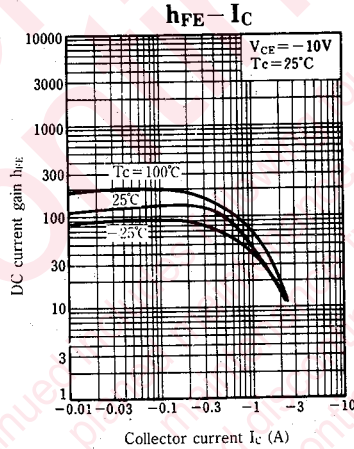
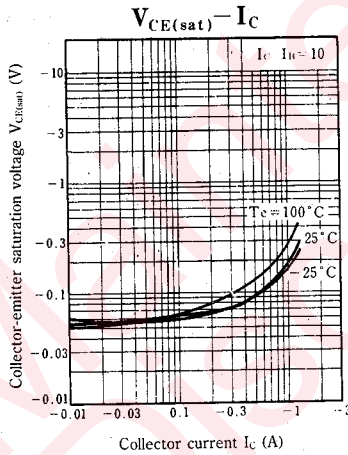
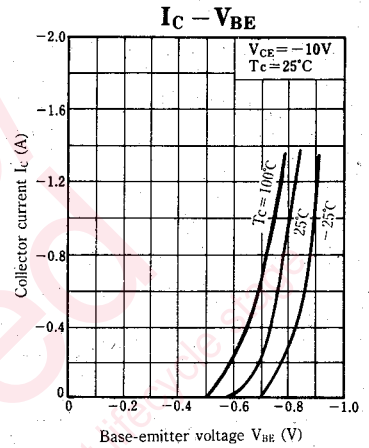
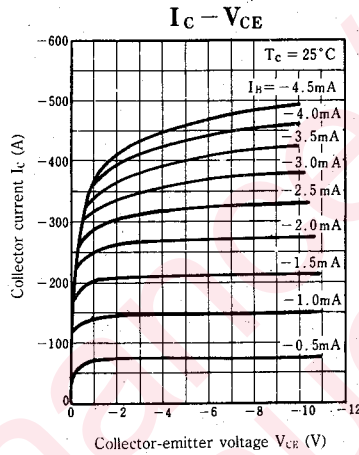
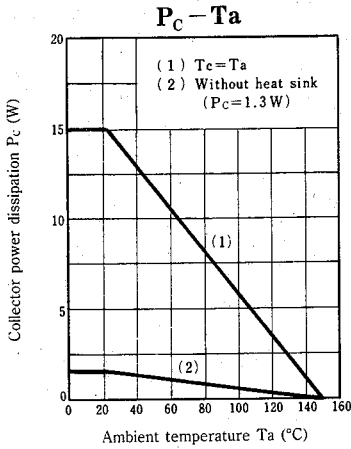
#### \* $h_{FE1}$ Classifications

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

### ■ Package Dimensions



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



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