

# 2SB956

## Silicon PNP epitaxial planer type

For low-frequency power amplification

Complementary to 2SD1280

### ■ Features

- Large collector power dissipation  $P_C$ .
- Low collector to emitter saturation voltage  $V_{CE(sat)}$ .
- Mini Power type package, allowing downsizing of the equipment and automatic insertion through the tape packing and the magazine packing.

### ■ Absolute Maximum Ratings (Ta=25°C)

Parameter	Symbol	Ratings	Unit
Collector to base voltage	$V_{CBO}$	-20	V
Collector to emitter voltage	$V_{CEO}$	-20	V
Emitter to base voltage	$V_{EBO}$	-5	V
Peak collector current	$I_{CP}$	-2	A
Collector current	$I_C$	-1	A
Collector power dissipation	$P_C^*$	1	W
Junction temperature	$T_j$	150	°C
Storage temperature	$T_{stg}$	-55 ~ +150	°C

\* Printed circuit board: Copper foil area of 1cm<sup>2</sup> or more, and the board thickness of 1.7mm for the collector portion

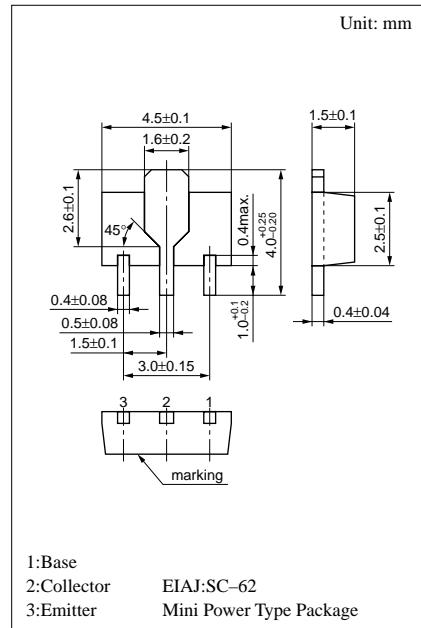
### ■ Electrical Characteristics (Ta=25°C)

Parameter	Symbol	Conditions	min	typ	max	Unit
Collector cutoff current	$I_{CBO}$	$V_{CB} = -10V, I_E = 0$			-1	μA
Collector to emitter voltage	$V_{CEO}$	$I_C = -1mA, I_B = 0$	-20			V
Emitter to base voltage	$V_{EBO}$	$I_E = -10μA, I_C = 0$	-5			V
Forward current transfer ratio	$h_{FE1}^{*1}$	$V_{CE} = -2V, I_C = -500mA^{*2}$	130		280	
	$h_{FE2}$	$V_{CE} = -2V, I_C = -1.5A^{*2}$	50			
Collector to emitter saturation voltage	$V_{CE(sat)}$	$I_C = -1A, I_B = -50mA^{*2}$			-0.5	V
Base to emitter saturation voltage	$V_{BE(sat)}$	$I_C = -500mA, I_B = -50mA$			-1.2	V
Transition frequency	$f_T$	$V_{CB} = -6V, I_E = 50mA, f = 200MHz$	200			MHz
Collector output capacitance	$C_{ob}$	$V_{CB} = -6V, I_E = 0, f = 1MHz$	40			pF

<sup>\*2</sup> Pulse measurement

<sup>\*1</sup> $h_{FE1}$  Rank classification

Rank	R	S
$h_{FE1}$	130 ~ 210	180 ~ 280
Marking Symbol	HR	HS



Marking symbol : H

