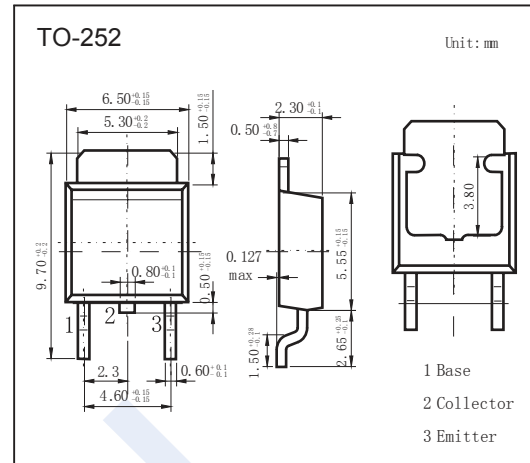


## PNP Transistors

## 2SB1407S

## ■ Features

- Low frequency power amplifier
- Complementary to 2SD2121

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

Parameter	Symbol	Rating	Unit
Collector - Base Voltage	$V_{CB0}$	-35	V
Collector - Emitter Voltage	$V_{CE0}$	-35	
Emitter - Base Voltage	$V_{EB0}$	-5	
Collector Current - Continuous	$I_C$	-2.5	A
Collector Current - Pulse	$I_{CP}$	-3	
Collector Power Dissipation	$P_C$	18	W
Junction Temperature	$T_J$	150	$^\circ\text{C}$
Storage Temperature range	$T_{stg}$	-55 to 150	

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

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector- base breakdown voltage	$V_{CB0}$	$I_C = -1 \text{ mA}$ , $I_E = 0$	-35			V
Collector- emitter breakdown voltage	$V_{CE0}$	$I_C = -10 \text{ mA}$ , $R_{BE} = \infty$	-35			
Emitter - base breakdown voltage	$V_{EB0}$	$I_E = -1 \text{ mA}$ , $I_C = 0$	-5			
Collector-base cut-off current	$I_{CBO}$	$V_{CB} = -35\text{V}$ , $I_E = 0$			-20	$\mu\text{A}$
Emitter cut-off current	$I_{EBO}$	$V_{EB} = -5\text{V}$ , $I_C = 0$			-0.1	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -2 \text{ A}$ , $I_B = -200 \text{ mA}$			-1	V
Base - emitter saturation voltage	$V_{BE(sat)}$	$I_C = -2 \text{ A}$ , $I_B = -200 \text{ mA}$			-1.2	
Base to emitter voltage	$V_{BE}$	$V_{CE} = -2\text{V}$ , $I_C = -1.5 \text{ A}$			-1.5	
DC current gain	$h_{FE}$	$V_{CE} = -2\text{V}$ , $I_C = -500 \text{ mA}$	60		320	
		$V_{CE} = -2\text{V}$ , $I_C = -1.5 \text{ A}$	20			

■ Classification of  $h_{fe(1)}$ 

Type	2SB1407S-B	2SB1407S-C	2SB1407S-D
Range	60-120	100-200	160-320

## PNP Transistors

### 2SB1407S

#### ■ Typical Characteristics

