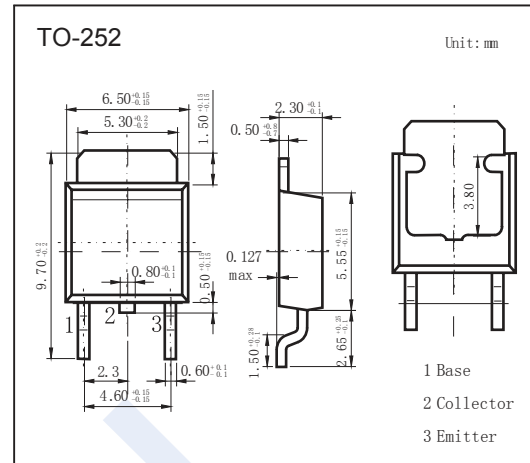


PNP Transistors

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	μA
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

