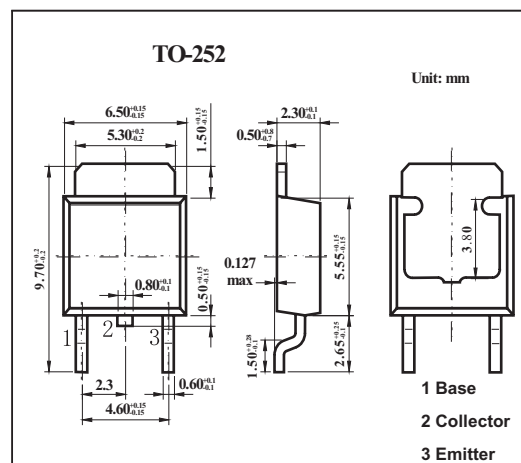


Silicon PNP Epitaxial

2SB1407S

■ Features

- Low frequency power amplifier.

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

Parameter	Symbol	Rating	Unit
Collector to base voltage	V_{CBO}	-35	V
Collector to emitter voltage	V_{CEO}	-35	V
Emitter to base voltage	V_{EBO}	-5	V
Collector current	I_C	-2.5	A
Peak collector current	I_{CP}	-3	A
Collector power dissipation	P_C	18	W
Junction temperature	T_J	150	$^\circ\text{C}$
Storage temperature	T_{stg}	-55 to +150	$^\circ\text{C}$

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

Parameter	Symbol	Testconditions	Min	Typ	Max	Unit
Collector to base breakdown voltage	$V_{(BR)CBO}$	$I_C = -1\text{ mA}, I_E = 0$	-35			V
Collector to emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = -10\text{ mA}, R_{BE} = \infty$	-35			V
Emitter to base breakdown voltage	$V_{(BR)EBO}$	$I_E = -1\text{ mA}, I_C = 0$	-5			V
Collector cutoff current	I_{CBO}	$V_{CB} = -35\text{ V}, I_E = 0$			-20	μA
DC current transfer ratio	h_{FE}	$V_{CE} = -2\text{ V}, I_C = -0.5\text{ A}$	60		320	
		$V_{CE} = -2\text{ V}, I_C = -1.5\text{ A}$	20			
Base to emitter voltage	V_{BE}	$V_{CE} = -2\text{ V}, I_C = -1.5\text{ A}$			-1.5	V
Collector to emitter saturation voltage	$V_{CE(sat)}$	$I_C = -2\text{ A}, I_B = -0.2\text{ A}$			-1.0	V

■ h_{FE} Classification

Rank	B	C	D
h_{FE}	60~120	100~200	160~320