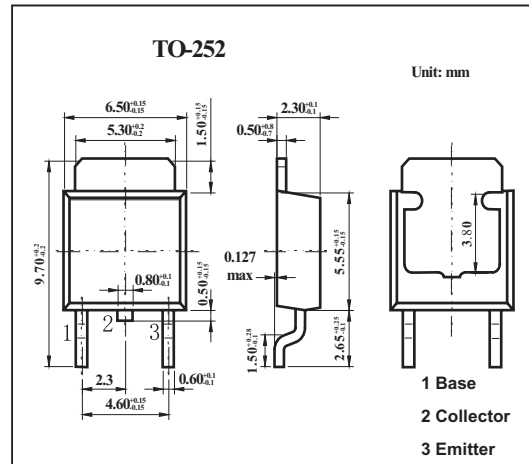


**2SD2122S**

■ Features

- Low frequency power amplifier.



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

Parameter	Symbol	Rating	Unit
Collector to base voltage	$V_{CB0}$	180	V
Collector to emitter voltage	$V_{CEO}$	120	V
Emitter to base voltage	$V_{EBO}$	5	V
Collector current	$I_c$	1.5	A
Peak collector current	$I_{cP}$	3	A
Collector power dissipation $T_c = 25^\circ\text{C}$	$P_c$	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	Testconditons	Min	Typ	Max	Unit
Collector to base breakdown voltage	$V_{(BR)CBO}$	$I_c = 1\text{ mA}, I_E = 0$	180			V
Collector to emitter breakdown voltage	$V_{(BR)CEO}$	$I_c = 10\text{ mA}, R_{BE} = \infty$	120			V
Emitter to base breakdown voltage	$V_{(BR)EBO}$	$I_E = 1\text{ mA}, I_c = 0$	5			V
Collector cutoff current	$I_{CBO}$	$V_{CB} = 160\text{ V}, I_E = 0$			10	$\mu\text{A}$
DC current transfer ratio *	$h_{FE}$	$V_{CE} = 5\text{ V}, I_c = 150\text{ mA}$	60		200	
		$V_{CE} = 5\text{ V}, I_c = 500\text{ mA}$	30			
Collector to emitter saturation voltage	$V_{CE(sat)}$	$I_c = 500\text{ mA}, I_b = 50\text{ mA}$			1	V
Base to emitter voltage	$V_{BE}$	$V_{CE} = 5\text{ V}, I_c = 150\text{ mA}$			1.5	V
Gain bandwidth product	$f_T$	$V_{CE} = 5\text{ V}, I_c = 150\text{ mA}$		180		MHz
Collector output capacitance	$C_{ob}$	$V_{CB} = 10\text{ V}, I_E = 0, f = 1\text{ MHz}$		14		pF

\* Pulse test

■  $h_{FE}$  Classification

Marking	B	C
$h_{FE}$	60~120	100~200