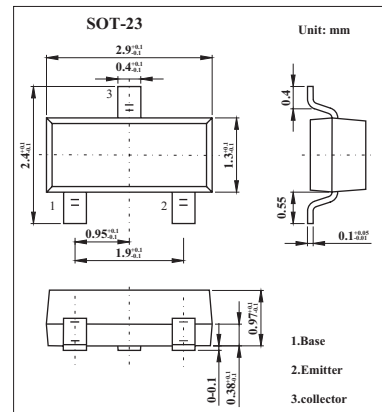


## Silicon PNP Epitaxial

## 2SA1171

## ■ Features

- Low frequency small signal amplifier

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

Parameter	Symbol	Rating	Unit
Collector to base voltage	$V_{CBO}$	-90	V
Collector to emitter voltage	$V_{CEO}$	-90	V
Emitter to base voltage	$V_{EBO}$	-5	V
Collector current	$I_C$	-50	mA
Collector power dissipation	$P_C$	150	mW
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 emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = -1\text{ mA}, R_{BE} = \infty$	-90			V
Collector cutoff current	$I_{CBO}$	$V_{CB} = -75\text{ V}, I_E = 0$			-0.5	$\mu\text{A}$
DC current transfer ratio	$h_{FE}$	$V_{CE} = -12\text{ V}, I_C = -2\text{ mA}$	250		800	
Base to emitter voltage	$V_{BE}$	$V_{CE} = -12\text{ V}, I_C = -2\text{ mA}$			-0.75	V
Collector to emitter saturation voltage	$V_{CE(sat)}$	$I_C = -10\text{ mA}, I_B = -1\text{ mA}$			-0.5	V
Gain bandwidth product	$f_T$	$V_{CE} = -12\text{ V}, I_C = -2\text{ mA}$		200		MHz
Collector output capacitance	$C_{ob}$	$V_{CB} = -25\text{ V}, I_E = 0, f = 1\text{ MHz}$		1.6		pF

■  $h_{FE}$  Classification

Marking	PD	PE
$h_{FE}$	250~500	400~800