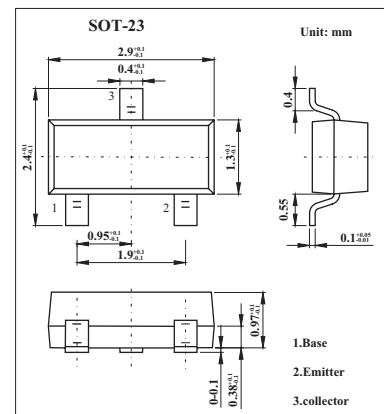


Silicon PNP Epitaxial

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	Testconditions	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	μA
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