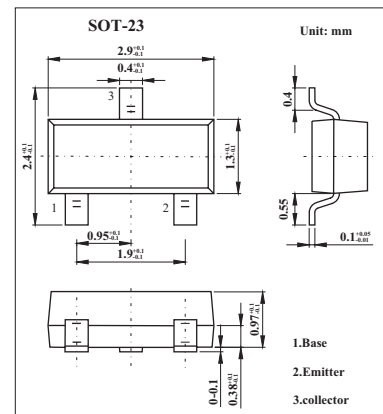


Silicon Transistor

2SA1226

■ Features

- High gain bandwidth product
- Low output capacitance
- Low noise

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

Parameter	Symbol	Rating	Unit
Collector-base voltage ($R_{BE} = \infty$)	V_{CB0}	-40	V
Collector-emitter voltage	V_{CE0}	-40	V
Emitter-base voltage	V_{EB0}	-5.0	V
Collector current - continuous	I_C	-30	mA
Total power dissipation at 25°C ambient temperature	P_T	200	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 cutoff current	I_{CBO}	$V_{CB} = -40\text{V}, I_E = 0$			-0.1	μA
Emitter cutoff current	I_{EBO}	$V_{EB} = -4.0\text{V}, I_C = 0$			-0.1	μA
DC current gain	h_{FE}	$V_{CE} = -10\text{V}, I_C = -1.0\text{mA}$	40	90	180	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -10\text{mA}, I_B = -1.0\text{mA}$		-0.09	-0.3	V
Base-emitter voltage	V_{BE}	$V_{CE} = -10\text{V}, I_C = -10\text{mA}$	-0.67	-0.72		V
Gain bandwidth product	f_T	$V_{CE} = -10\text{V}, I_E = 1.0\text{mA}$	250	400		MHz
Output capacitance	C_{ob}	$V_{CB} = -10\text{V}, I_E = 0, f = 1.0\text{MHz}$		1.1	2.0	pF
Noise figure	NF	$V_{CE} = -10\text{V}, I_C = -1.0\text{mA}, R_G = 500\Omega, f = 1.0\text{MHz}$		3.5		dB

■ h_{FE} Classification

Marking	E2	E3	E4
h_{FE}	40~80	60~120	90~180