

## SMD Type

## Transistors

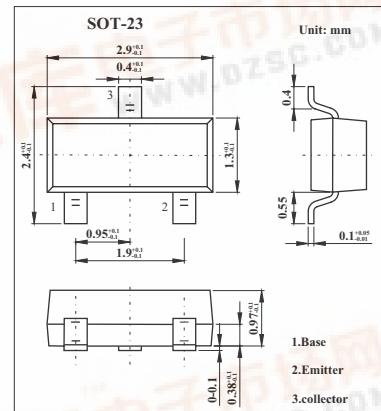
## Silicon Transistor

## 2SA1226



## ■ Features

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



## ■ Absolute Maximum Ratings Ta = 25°C

Parameter	Symbol	Rating	Unit
Collector-base voltage ( $R_{BE} = \infty$ )	V <sub>CBO</sub>	-40	V
Collector-emitter voltage	V <sub>CEO</sub>	-40	V
Emitter-base voltage	V <sub>EBO</sub>	-5.0	V
Collector current - continuous	I <sub>c</sub>	-30	mA
Total power dissipation at 25°C ambient temperature	P <sub>T</sub>	200	mW
Junction temperature	T <sub>j</sub>	150	°C
Storage temperature	T <sub>stg</sub>	-55 to +150	°C

## ■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Collector cutoff current	I <sub>CB0</sub>	V <sub>CB</sub> = -40V , I <sub>E</sub> = 0			-0.1	μA
Emitter cutoff current	I <sub>EB0</sub>	V <sub>EB</sub> = -4.0V , I <sub>C</sub> = 0			-0.1	μA
DC current gain	h <sub>FE</sub>	V <sub>CE</sub> = -10V , I <sub>c</sub> = -1.0mA	40	90	180	
Collector-emitter saturation voltage	V <sub>CES(sat)</sub>	I <sub>C</sub> = -10mA , I <sub>B</sub> = -1.0mA		-0.09	-0.3	V
Base-emitter vVoltage	V <sub>BE</sub>	V <sub>CE</sub> = -10V , I <sub>C</sub> = -10mA	-0.67	-0.72		V
Gain bandwidth product	f <sub>T</sub>	V <sub>CE</sub> = -10V , I <sub>E</sub> = 1.0mA	250	400		MHz
Output capacitance	C <sub>ob</sub>	V <sub>CB</sub> = -10V , I <sub>E</sub> = 0 , f = 1.0MHz		1.1	2.0	pF
Noise figure	NF	V <sub>CE</sub> = -10V , I <sub>C</sub> = -1.0mA, RG = 500Ω, f = 1.0MHz		3.5		dB

## ■ hFE Classification

Marking	E2	E3	E4
hFE	40~80	60~120	90~180