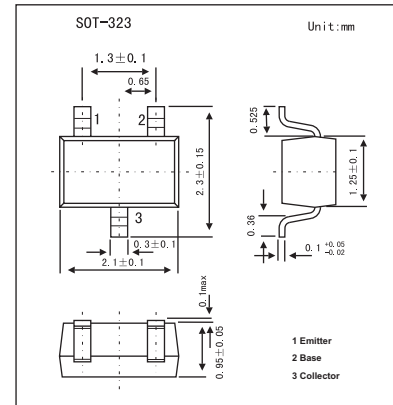


NPN Silicon Epitaxia

2SC4179

■ Features

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



■ Absolute Maximum Ratings Ta = 25°C

Parameter	Symbol	Rating	Unit
Collector-base voltage	V _{CB0}	50	V
Collector-emitter voltage	V _{CEO}	30	V
Emitter-base voltage	V _{EB0}	5	V
Collector current	I _C	50	mA
Total power dissipation	P _T	150	mW
Junction temperature	T _j	150	°C
Storage temperature	T _{stg}	-55 to +150	°C

■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Testconditions	Min	Typ	Max	Unit
Collector cutoff current	I _{CBO}	V _{CB} = 50V, I _E = 0			0.1	μA
Emitter cutoff current	I _{EBO}	V _{EB} = 5V, I _C = 0			0.1	μA
DC current gain *	h _{FE}	V _{CE} = 6V, I _C = 1.0mA	60	100	180	
Base-emitter voltage *	V _{BE}	V _{CE} = 6V, I _C = 1.0mA	0.65	0.70	0.75	V
Collector-emitter saturation voltage *	V _{CE(sat)}	I _C = 10mA, I _B = 1.0mA		0.08	0.3	V
Gain bandwidth product	f _T	V _{CE} = 6V, I _E = -1.0mA	150	250		MHz
Output capacitance	C _{ob}	V _{CE} = 6V, I _E = 0, f = 1MHz		1.9	2.2	pF
Collector to base time constant	C _{c'rb'b}	V _{CB} = 6V, I _E = -10mA, f = 31.9MHz		10	15	ps
Noise figure	NF	V _{CE} = 6V, I _E = -1.0mA, R _g = 500Ω, f = 1.0MHz		2	4	dB

*. PW ≤ 350μs, duty cycle ≤ 2%

■ hFE Classification

Marking	FA3	FA4
hFE	60~120	90~180