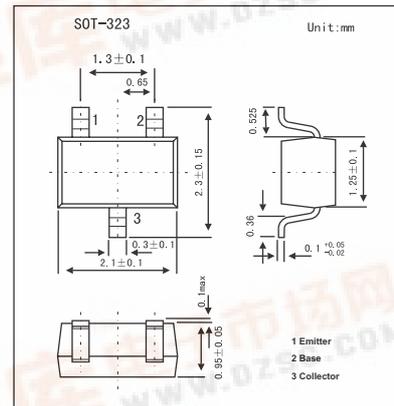


SMD Type Transistors

NPN Silicon Epitaxia
2SC4177

Features

- High dc current gain
- High voltage.



Absolute Maximum Ratings Ta = 25°C

Parameter	Symbol	Rating	Unit
Collector-base voltage	V _{CB0}	60	V
Collector-emitter voltage	V _{CEO}	50	V
Emitter-base voltage	V _{EBO}	5	V
Collector current	I _C	100	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	Testconditons	Min	Typ	Max	Unit
Collector cutoff current	I _{CBO}	V _{CB} = 60V, 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	90	200	600	
Collector-emitter saturation voltage *	V _{CE(sat)}	I _C = 100mA, I _B = 10mA		0.15	0.3	V
Base-emitter saturation voltage *	V _{BE(sat)}	I _C = 100mA, I _B = 10mA		0.86	1.0	V
Base emitter voltage *	V _{BE}	V _{CE} = 6V, I _C = 1.0mA	0.55	0.62	0.65	V
Gain bandwidth product	f _T	V _{CE} = 6V, I _E = -10mA		250		MHz
Output capacitance	C _{ob}	V _{CE} = 6V, I _E = 0, f = 1MHz		3.0		pF

*. PW ≤ 350μs, duty cycle ≤ 2%

hFE Classification

Marking	L4	L5	L6	L7
hFE	90~180	135~270	200~400	300~600

