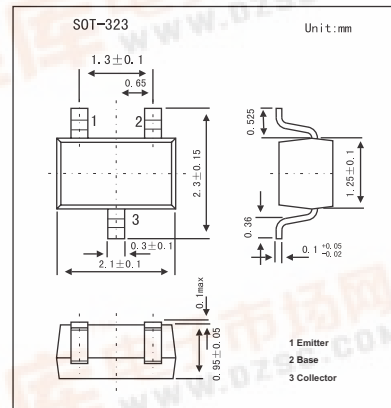


SMD Type Transistors

NPN Silicon Epitaxia
2SC4181A

■ Features

- High DC current gain:Hfe=1000 to 3200
- Low VCE(sat): VCE(sat)=0.07v TYP
- High VEBO: VEBO=15V



■ 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}	15	V
Collector current	I _C	150	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} = 50V, I _E =0			100	nA
Emitter cutoff current	I _{EBO}	V _{EB} = 10V, I _C =0			100	nA
DC current gain *	h _{FE}	V _{CE} = 5.0V, I _C = 1.0mA	1000	1800	3200	
Base-emitter voltage *	V _{BE}	V _{CE} = 5.0V, I _C = 1.0mA		0.56		V
Collector-emitter saturation voltage *	V _{CE(sat)}	I _C = 50mA, I _B = 5.0mA		0.07	0.3	V
Base-emitter saturation voltage *	V _{BE(sat)}	I _C = 50mA, I _B = 5.0mA		0.8	1.2	V
Gain bandwidth product	f _T	V _{CE} = 5.0V, I _E = -10mA		250		MHz
Output capacitance	C _{ob}	V _{CB} = 5.0V, I _E = 0, f = 1.0MHz		3.0		pF
Turn-on time	t _{on}	V _{CC} = 10V, V _{BE(off)} = -2.7V		0.13		ns
Storage time	t _{stg}	I _C = 150mA,		0.72		ns
Turn-off time	t _{off}	I _{B1} = -I _{B2} = 15mA		1.22		ns

*. PW≤350μs,duty cycle≤2%

■ hFE Classification

Marking	L15	L16
hFE	1000~2000	1600~3200

