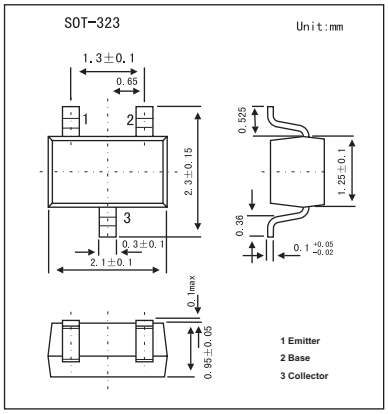
Silicon NPN Epitaxial

2SC4213



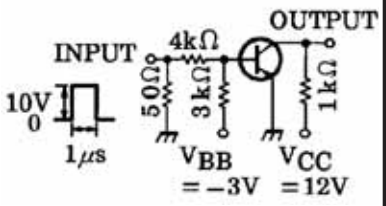
■ Features

- High emitter-base voltage: V_{EBO} = 25 V (min).
- High reverse hFE: Reverse h_{FE} = 150 (typ.) (V_{CE} = -2 V, I_C = -4 mA).
- Low on resistance: R_{ON} = 1Ω (typ.) (I_B = 5 mA).
- High DC current gain: h_{FE} = 200～1200.
- Small package.

■ Absolute Maximum Ratings Ta = 25℃

Parameter	Symbol	Rating	Unit
Collector-base voltage	V_{CBO}	50	V
Collector-emitter voltage	V_{CEO}	20	V
Emitter-base voltage	V_{EBO}	25	V
Collector current	I_C	300	mA
Base current	I_B	60	mA
Collector power dissipation	P_C	100	mW
Junction temperature	T_j	125	℃
Storage temperature	T_{stg}	-55 to +125	℃

■ Electrical Characteristics Ta = 25℃

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Collector cut-off current	I_{CBO}	V_{CB} = 50 V, I_E = 0			0.1	μA
Emitter cut-off current	I_{EBO}	V_{EB} = 25 V, I_C = 0			0.1	μA
DC current gain	h_{FE}	V_{CE} = 2 V, I_C = 4 mA	200		1200	
Collector-emitter saturation voltage	$V_{CE\ (sat)}$	I_C = 30 A, I_B = 3 mA		0.042	0.1	V
Base-emitter voltage	V_{BE}	V_{CE} = 2 V, I_C = 4 mA		0.61		V
Transition frequency	f_T	V_{CE} = 6 V, I_C = 4 mA		30		MHz
Collector output capacitance	C_{ob}	V_{CB} = 10 V, I_E = 0, f = 1 MHz		4.8	7	pF
Turn-on time	ton			160		ns
Storage time	tstg			500		ns
Fall time	tf			130		ns

Duty cycle ≤2%

■ hFE Classification

Marking	AA	AB
hFE	200～700	350～1200