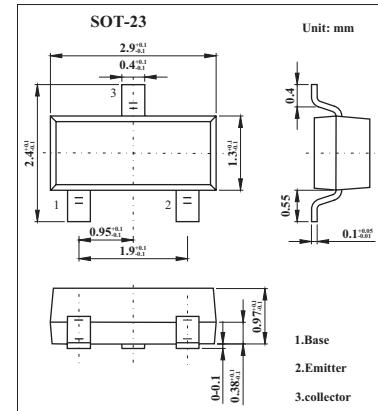


NPN Transistor

2SC3052



■ Features

- Collector current : $I_C=0.2A$
- Power dissipation : $P_c=0.15W$

■ Absolute Maximum Ratings $T_a = 25^\circ C$

Parameter	Symbol	Rating	Unit
Collector-base voltage	V_{CBO}	50	V
Collector-emitter voltage	V_{CEO}	50	V
Emitter-base voltage	V_{EBO}	6	V
Collector current	I_C	200	mA
power dissipation *	P_c	150	mW
Junction temperature	T_j	150	°C
Storage temperature	T_{stg}	-55 to +150	°C

*. 0.7 mmx16 cm² ceramic substrate■ Electrical Characteristics $T_a = 25^\circ C$

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Collector-base breakdown voltage	V_{CBO}	$I_C = 100 \mu A, I_E=0$	50			V
Collector-emitter breakdown voltage	V_{CEO}	$I_C=100 \mu A, I_B=0$	50			V
Emitter-base breakdown voltage	V_{EBO}	$I_E=100 \mu A, I_C=0$	6			V
Collector cut-off current	I_{CBO}	$V_{CB}=50V, I_E=0$			0.1	μA
Emitter cut-off current	I_{EBO}	$V_{EB}=6V, I_C=0$			0.1	μA
DC current gain	h_{FE}	$V_{CE}=6V, I_C=1mA$	150	800		
		$V_{CE}=6V, I_C=0.1mA$	50			
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=100mA, I_B= 10mA$			0.3	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C= 100mA, I_B= 10mA$			1	V
Collector output capacitance	C_{ob}	$V_{CE}=6V, I_E=0, f=1MHz$			4	pF
Noise figure	NF	$V_{CE}=6V, I_E=-0.1mA, f=1KHz, R_G=2K \Omega$			15	dB
Transition frequency	f_T	$V_{CE}= 6V, I_C= 10mA$	180			MHz

■ hFE Classification

Marking	LE	LF	LG
Rank	E	F	G
hFE	150 to 300	250 to 500	400 to 800