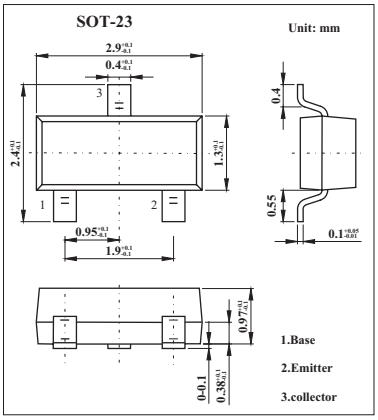
TY Semicondutor®

Product specification

2SC3052



■ Features

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

■ Absolute Maximum Ratings Ta = 25℃

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	℃
Storage temperature	T_{stg}	-55 to +150	℃

* . 0.7 mmx16 cm^2 ceramic substrate

■ Electrical Characteristics Ta = 25℃

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Collector-base breakdown voltage	V_{CBO}	I_C = 100μA,I_E=0	50			V
Collector-emitter breakdown voltage	V_{CEO}	I_C=100μA,I_B=0	50			V
Emitter-base breakdown voltage	V_{EBO}	I_E=100μA,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=2KΩ			15	dB
Transition frequency	f_T	V_{CE}= 6V, I_C= 10mA	180			MHz

■ h_{FE} Classification

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