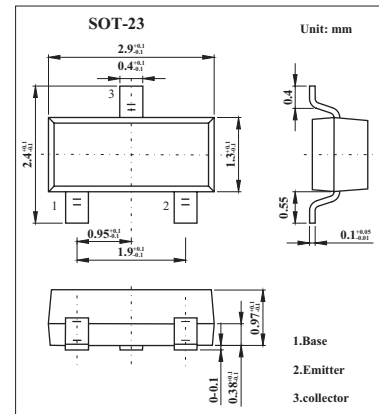


## NPN Epitaxial Planar Silicon Transistor

## 2SC4852

## ■ Features

- Small output capacitance.
- Low collector-to-emitter saturation voltage.
- Small ON resistance.

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

Parameter	Symbol	Rating	Unit
Collector-base voltage	$V_{CB0}$	25	V
Collector-emitter voltage	$V_{CE0}$	15	V
Emitter-base voltage	$V_{EB0}$	5	V
Collector current	$I_C$	100	mA
Collector current (pulse)	$I_{CP}$	200	mA
Base current	$I_B$	20	mA
Collector dissipation	$P_C$	250	mW
Junction temperature	$T_j$	150	$^\circ\text{C}$
Storage temperature	$T_{stg}$	-55 to +150	$^\circ\text{C}$

■ Electrical Characteristics  $T_a = 25^\circ\text{C}$ 

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Collector cutoff current	$I_{CBO}$	$V_{CB} = 15V, I_E = 0$			0.1	$\mu\text{A}$
Emitter cutoff current	$I_{EBO}$	$V_{EB} = 4V, I_C = 0$			0.1	$\mu\text{A}$
DC current gain	$h_{FE}$	$V_{CE} = 2V, I_C = 5mA$	800		3200	
Gain bandwidth product	$f_T$	$V_{CE} = 5V, I_C = 10mA$		240		MHz
Output capacitance	$C_{ob}$	$V_{CB} = 10V, f = 1.0MHz$		1.4		pF
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = 10mA, I_B = 1mA$		14	30	mV
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C = 10mA, I_B = 1mA$		0.74	1.1	V
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C = 10\mu A, I_E = 0$	25			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = 1mA, R_{BE} = \infty$	15			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E = 10\mu A, I_C = 0$	5			V
On resistance	$R_{on}$	$I_B = 3mA, f = 1.0MHz$		0.9		$\Omega$

## ■ Marking

Marking	YT
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