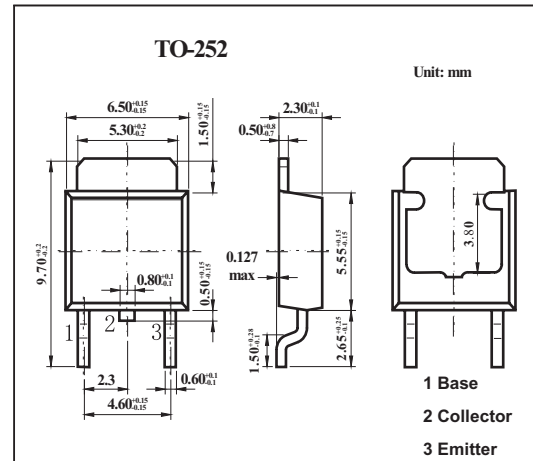


## NPN Silicon Triple Diffused Transistor

## 2SC3496A



### ■ Features

- High-speed switching
- High collector-base voltage (Emitter open)  $V_{CB0}$
- Satisfactory linearity of forward current transfer ratio  $h_{FE}$

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

Parameter	Symbol	Rating	Unit
Collector-base voltage	$V_{CB0}$	1000	V
Collector-emitter voltage	$V_{CES}$	1000	V
Collector-emitter voltage	$V_{CEO}$	900	V
Emitter-base voltage (Collector open)	$V_{EBO}$	7	V
Base current	$I_B$	0.3	A
Collector current	$I_C$	1	A
Peak collector current	$I_{CP}$	2	A
Collector power dissipation	$P_C$	$T_c = 25^\circ\text{C}$	30
		$T_a = 25^\circ\text{C}$	1.3
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	Testconditions	Min	Typ	Max	Unit
Collector-emitter voltage	$V_{CEO}$	$I_C = 1\text{ mA}, I_B = 0$	900			V
Collector-base cutoff current	$I_{CBO}$	$V_{CB} = 1000\text{ V}, I_E = 0$			50	$\mu\text{A}$
Emitter-base cutoff current (Collector open)	$I_{EBO}$	$V_{EB} = 7\text{ V}, I_C = 0$			50	$\mu\text{A}$
Forward current transfer ratio	$h_{FE}$	$V_{CE} = 5\text{ V}, I_C = 0.05\text{ A}$	6			
		$V_{CE} = 5\text{ V}, I_C = 0.5\text{ A}$	3			
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = 0.2\text{ A}, I_B = 0.04\text{ A}$			1.5	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C = 0.2\text{ A}, I_B = 0.04\text{ A}$			1.0	V
Transition frequency	$f_T$	$V_{CE} = 10\text{ V}, I_C = 0.05\text{ A}, f = 1\text{ MHz}$		4		MHz
Turn-on time	$t_{on}$	$I_C = 0.2\text{ A}$			1.0	$\mu\text{s}$
Storage time	$t_{stg}$	$I_{B1} = 0.04\text{ A}, I_{B2} = -0.08\text{ A}$			3.0	$\mu\text{s}$
Fall time	$t_f$	$V_{CC} = 250\text{ V}$			1	$\mu\text{s}$