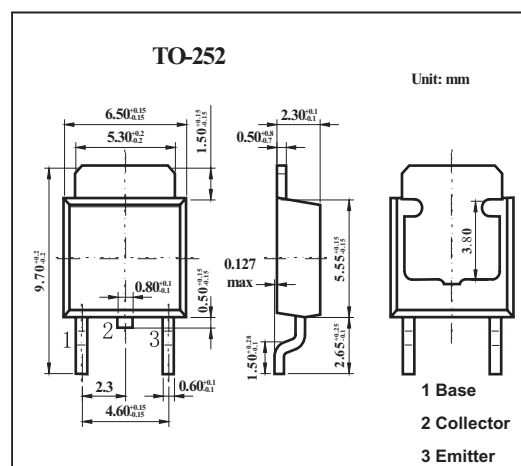


NPN Silicon Triple Diffused Transistor

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_{EB0}	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 $T_C = 25^\circ\text{C}$ $T_a = 25^\circ\text{C}$	P_C	30	W
		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	μA
Emitter-base cutoff current (Collector open)	I_{EBO}	$V_{EB} = 7\text{ V}, I_C = 0$			50	μA
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}	$I_C = 0.2\text{ A}$ $I_{B1} = 0.04\text{ A}, I_{B2} = -0.08\text{ A}$			1.0	μs
Storage time	t_{stg}				3.0	μs
Fall time	t_f	$V_{CC} = 250\text{ V}$			1	μs