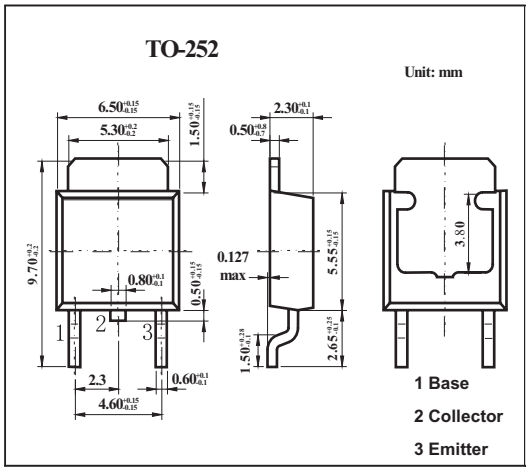
NPN Silicon Triple Diffused Transistor

2SC3496A



Features

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

Absolute Maximum Ratings Ta = 25℃

Parameter	Symbol	Rating	Unit
Collector-base voltage	V_{CBO}	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 T_C = 25℃	P_C	30	W
Collector power dissipation T_a = 25℃	P_C	1.3	W
Junction temperature	T_j	150	℃
Storage temperature	T_{stg}	-55 to +150	℃

Electrical Characteristics Ta = 25℃

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Collector-emitter voltage	V_{CEO}	I_C = 1 mA, I_B = 0	900			V
Collector-base cutoff current	I_{CBO}	V_{CB} = 1000 V, I_E = 0			50	μA
Emitter-base cutoff current (Collector open)	I_{EBO}	V_{EB} = 7 V, I_C = 0			50	μA
Forward current transfer ratio	h_{FE}	V_{CE} = 5 V, I_C = 0.05 A	6			
Forward current transfer ratio	h_{FE}	V_{CE} = 5 V, I_C = 0.5 A	3			
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C = 0.2 A, I_B = 0.04 A			1.5	V
Base-emitter saturation voltage	$V_{BE(sat)}$	I_C = 0.2 A, I_B = 0.04 A			1.0	V
Transition frequency	f_T	V_{CE} = 10 V, I_C = 0.05 A, f = 1 MHz		4		MHz
Turn-on time	t_{on}	I_C = 0.2 A			1.0	μs
Storage time	t_{stg}	I_{B1} = 0.04 A, I_{B2} = -0.08 A			3.0	μs
Fall time	t_f	V_{CC} = 250 V			1	μs