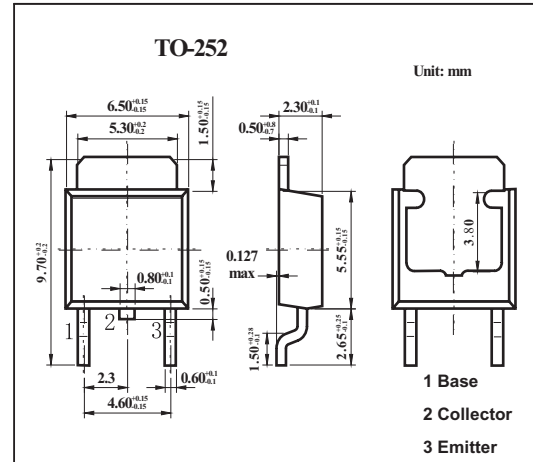


Silicon NPN Triple Diffused

2SC4499S

■ Features

- High speed and high voltage switching

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

Parameter	Symbol	Rating	Unit
Collector to base voltage	V_{CB0}	500	V
Collector to emitter voltage	V_{CEO}	400	V
Emitter to base voltage	V_{EBO}	10	V
Collector current	I_{CP}	0.5	A
Collector peak current	I_C	1	A
Collector power dissipation $TC=25^\circ\text{C}$	P_C	0.75	W
		10	W
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	Test conditions	Min	Typ	Max	Unit
Collector to emitter sustain voltage	$V_{CE0(sus)}$	$I_C = 0.1\text{ A}$, $R_{BE} = \infty$, $L = 100\text{ mH}$	400			V
Emitter to base breakdown voltage	$V_{(BR)EBO}$	$I_E = 10\text{ mA}$, $I_C = 0$	10			V
Collector cutoff current	I_{CBO}	$V_{CB} = 400\text{ V}$, $I_E = 0$			20	μA
	I_{CEO}	$V_{CE} = 350\text{ V}$, $R_{BE} = \infty$			50	
DC current transfer ratio	h_{FE}	$V_{CE} = 5\text{ V}$, $I_C = 0.25\text{ A}^*1$	12			
		$V_{CE} = 5\text{ V}$, $I_C = 0.5\text{ A}^*1$	5			
Collector to emitter saturation voltage	$V_{CE(sat)}$	$I_C = 0.25\text{ A}$, $I_B = 0.05\text{ A}^*1$			1.0	V
Base to emitter saturation voltage	$V_{BE(sat)}$	$I_C = 0.25\text{ A}$, $I_B = 0.05\text{ A}^*1$			1.5	V
Turn on time	t_{on}	$I_C = 0.5\text{ A}$, $I_{B1} = -I_{B2} = 0.1\text{ A}$,			1.0	μs
Storage time	t_{stg}	$V_{CC} = 150\text{ V}$			2	μs
Fall time	t_f				1.0	μs

* 1 Pulse test.