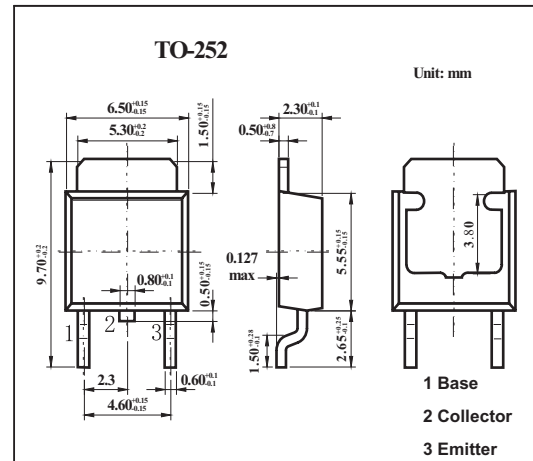


## Silicon NPN Triple Diffused

## 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	$V_{CBO}$	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	Testconditions	Min	Typ	Max	Unit
Collector to emitter sustain voltage	$V_{CEO(sus)}$	$I_C = 0.1\text{ A}, R_{BE} = \infty, L = 100\text{ mH}$	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	$\mu\text{A}$
	$I_{CEO}$	$V_{CE} = 350\text{ V}, R_{BE} = \infty$			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	$\mu\text{s}$
Storage time	$t_{stg}$	$V_{CC} = 150\text{ V}$			2	$\mu\text{s}$
Fall time	$t_f$				1.0	$\mu\text{s}$

\* 1 Pulse test.