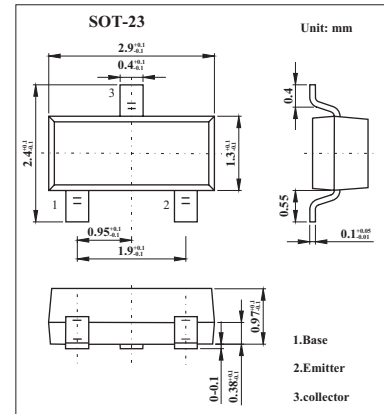


## Silicon NPN Triple Diffused Type

## 2SC4497

## ■ Features

- High voltage.
- Low saturation voltage.
- Small collector output capacitance.

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

Parameter	Symbol	Rating	Unit
Collector-base voltage	$V_{CB0}$	300	V
Collector-emitter voltage	$V_{CE0}$	300	V
Emitter-base voltage	$V_{EB0}$	6	V
Collector current	$I_C$	100	mA
Base current	$I_B$	20	mA
Collector power dissipation	$P_C$	200	mW
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 cut-off current	$I_{CBO}$	$V_{CB} = 300\text{ V}, I_E = 0$			0.1	$\mu\text{A}$
Emitter cut-off current	$I_{EBO}$	$V_{EB} = 6\text{ V}, I_C = 0$			0.1	$\mu\text{A}$
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C = 0.1\text{ mA}, I_E = 0$	300			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = 1\text{ mA}, I_B = 0$	300			V
DC current gain	$h_{FE}$	$V_{CE} = 10\text{ V}, I_C = 20\text{ mA}$	30		150	
		$V_{CE} = 10\text{ V}, I_C = 1\text{ mA}$	20			
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = 20\text{ mA}, I_B = 2\text{ mA}$			0.5	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C = 20\text{ mA}, I_B = 2\text{ mA}$			1.2	V
Transition frequency	$f_T$	$V_{CE} = 10\text{ V}, I_C = 10\text{ mA}$		70		MHz
Collector output capacitance	$C_{ob}$	$V_{CB} = 20\text{ V}, I_E = 0, f = 1\text{ MHz}$		3	4	pF

■  $h_{FE}$  Classification

Marking	3R	3O
Rank	R	O
$h_{FE}$	30~90	50~150