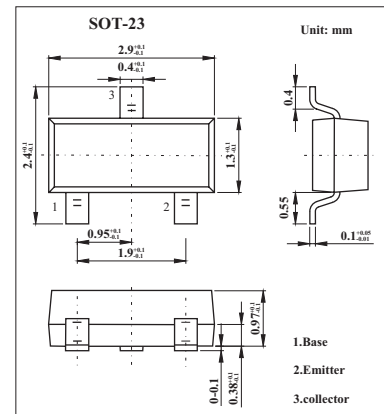


Silicon NPN Triple Diffused Type

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_{CEO}	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	μA
Emitter cut-off current	I_{EBO}	$V_{EB} = 6\text{ V}, I_C = 0$			0.1	μA
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