

2SC2497, 2SC2497A

Silicon NPN epitaxial planar type

For low-frequency power amplification
Complementary to 2SA1096 and 2SA1096A

■ Features

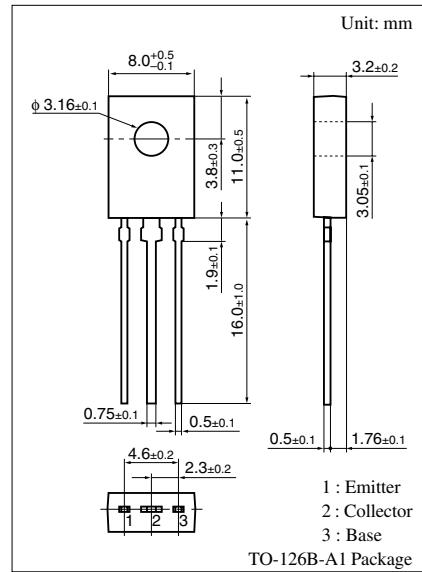
- High collector to emitter voltage V_{CEO}
- TO-126B package which requires no insulation plate for installation to the heat sink

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

Parameter	Symbol	Rating	Unit
Collector to base voltage	V_{CBO}	70	V
Collector to emitter voltage	V_{CEO}	50	V
2SC2497		60	
Emitter to base voltage	V_{EBO}	5	V
Peak collector current	I_{CP}	3	A
Collector current	I_C	1.5	A
Collector power dissipation	P_C	1.2 * ¹	W
2SC2497A		5 * ²	
Junction temperature	T_j	150	$^\circ\text{C}$
Storage temperature	T_{stg}	-55 to +150	$^\circ\text{C}$

Note) *1: Without heat sink

*2: With a $100 \times 100 \times 2$ mm A1 heat sink

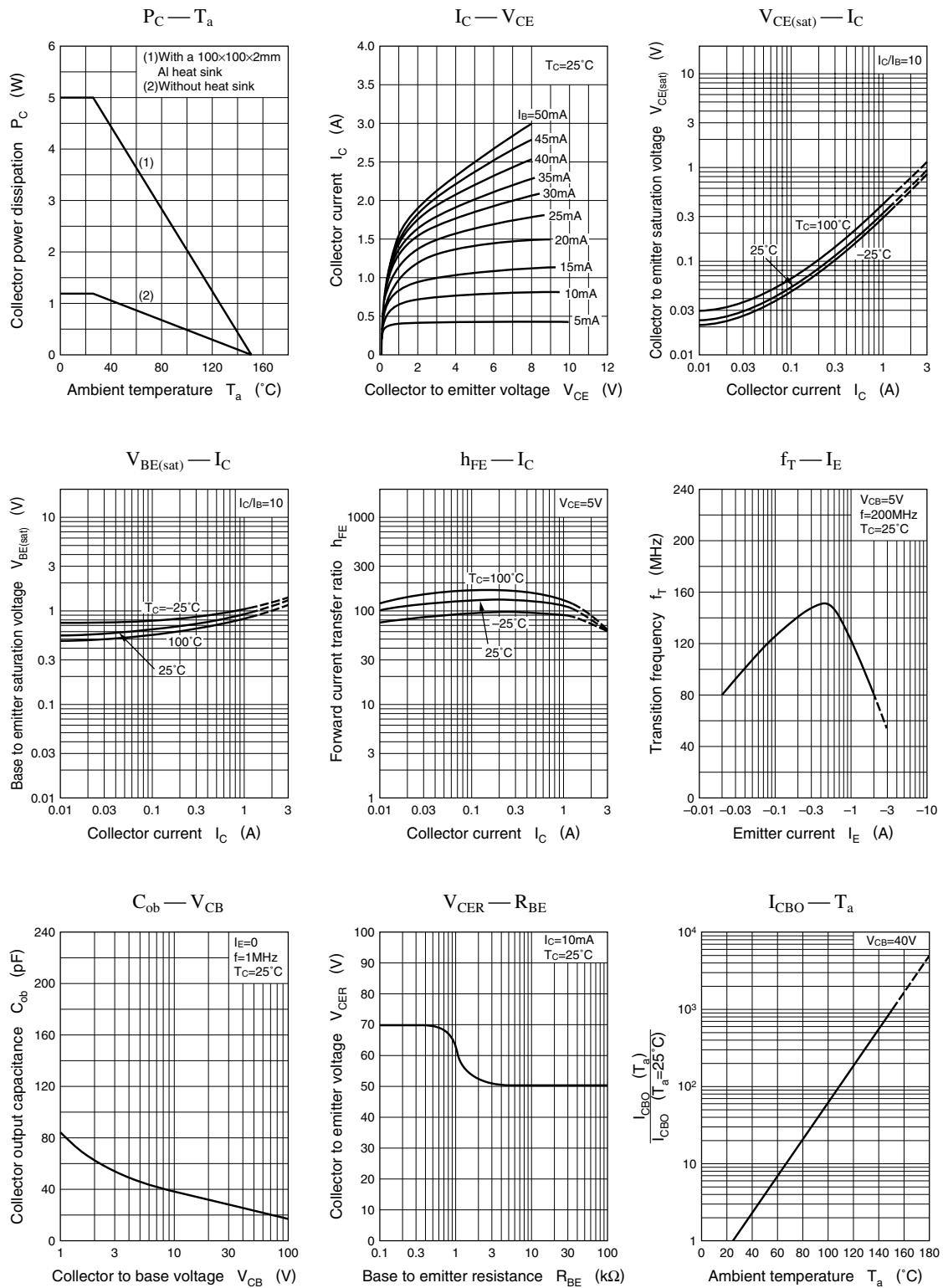


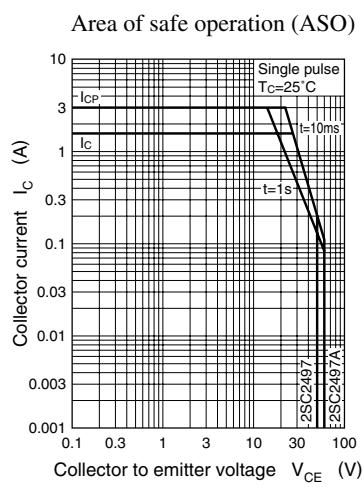
■ Electrical Characteristics $T_C = 25^\circ\text{C}$

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Collector cutoff current	I_{CBO}	$V_{CB} = 20$ V, $I_E = 0$			1	μA
	I_{CEO}	$V_{CE} = 10$ V, $I_B = 0$			100	μA
Emitter cutoff current	I_{EBO}	$V_{EB} = 5$ V, $I_C = 0$			10	μA
Collector to base voltage	V_{CBO}	$I_C = 1$ mA, $I_E = 0$	70			V
Collector to emitter voltage	V_{CEO}	$I_C = 2$ mA, $I_B = 0$	50			V
2SC2497			60			
2SC2497A						
Forward current transfer ratio *	h_{FE}	$V_{CE} = 5$ V, $I_C = 1$ A	80		220	
Collector to emitter saturation voltage	$V_{CE(\text{sat})}$	$I_C = 1.5$ A, $I_B = 0.15$ A			1	V
Base to emitter saturation voltage	$V_{BE(\text{sat})}$	$I_C = 1.5$ A, $I_B = 0.15$ A			1.5	V
Transition frequency	f_T	$V_{CB} = 5$ V, $I_E = -0.5$ A, $f = 200$ MHz		150		MHz
Collector output capacitance	C_{ob}	$V_{CB} = 20$ V, $I_E = 0$, $f = 1$ MHz		35		pF

Note) *: Rank classification

Rank	R	S
h_{FE}	80 to 160	120 to 220





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