

Silicon NPN Power Transistors

2SC2497 2SC2497A

DESCRIPTION

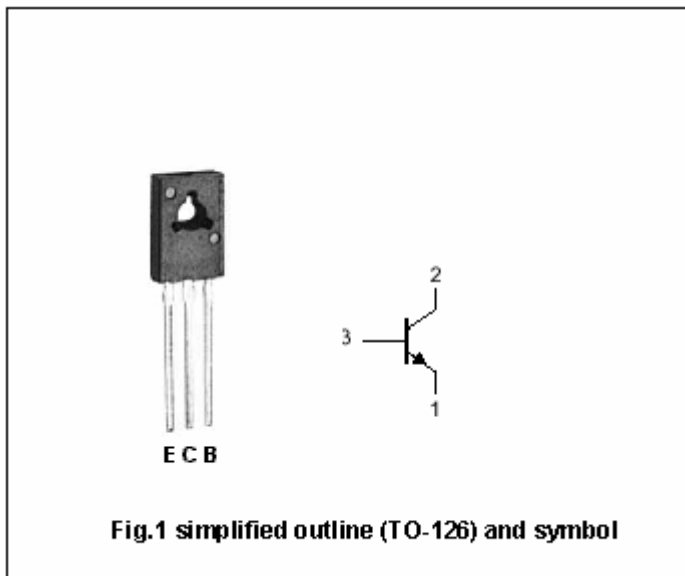
- With TO-126 package
- Complement to type 2SA1096/A
- High collector to emitter voltage  $V_{CEO}$

APPLICATIONS

- For low-frequency power amplification

PINNING

PIN	DESCRIPTION
1	Emitter
2	Collector;connected to mounting base
3	Base



Absolute maximum ratings( $T_a=25$  )

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT	
$V_{CBO}$	Collector-base voltage	Open emitter	70	V	
$V_{CEO}$	Collector- emitter voltage	Open base	2SC2497	50	V
			2SC2497A	60	
$V_{EBO}$	Emitter-base voltage	Open collector	5	V	
$I_C$	Collector current		1.5	A	
$I_{CM}$	Collector current-peak		3	A	
$P_D$	Total power dissipation	$T_C=25$	$1.2^{*1}$	W	
			$5^{*2}$		
$T_j$	Junction temperature		150		
$T_{stg}$	Storage temperature		-55 ~ +150		

Note) \*1: Without heat sink

\*2: With a 100 × 100 × 2 mm A1 heat sink

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## CHARACTERISTICS

T<sub>j</sub>=25 unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT	
V <sub>(BR)CEO</sub>	Collector-emitter breakdown voltage	2SC2497	I <sub>C</sub> =2mA ; I <sub>B</sub> =0	50			V
		2SC2497A		60			
V <sub>(BR)CBO</sub>	Collector-base breakdown voltage	I <sub>C</sub> =1mA ; I <sub>E</sub> =0	70			V	
V <sub>CEsat</sub>	Collector-emitter saturation voltage	I <sub>C</sub> =1.5A ; I <sub>B</sub> =0.15A			1.0	V	
V <sub>BEsat</sub>	Base-emitter saturation voltage	I <sub>C</sub> =1.5A ; I <sub>B</sub> =0.15A			1.5	V	
I <sub>CEO</sub>	Collector cut-off current	V <sub>CE</sub> =10V ; I <sub>B</sub> =0			100	μA	
I <sub>CBO</sub>	Collector cut-off current	V <sub>CB</sub> =20V ; I <sub>E</sub> =0			1	μA	
I <sub>EBO</sub>	Emitter cut-off current	V <sub>EB</sub> =5V ; I <sub>C</sub> =0			10	μA	
h <sub>FE</sub>	DC current gain	I <sub>C</sub> =1A ; V <sub>CE</sub> =5V	80		220		
C <sub>OB</sub>	Output capacitance	I <sub>E</sub> =0 ; V <sub>CB</sub> =20V, f=1MHz		35		pF	
f <sub>T</sub>	Transition frequency	I <sub>E</sub> =0.5A ; V <sub>CB</sub> =5V, f=200MHz		150		MHz	

◆ h<sub>FE</sub> Classifications

R	S
80-160	120-220

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PACKAGE OUTLINE

