

Silicon NPN Power Transistors

2SC2497 2SC2497A

DESCRIPTION

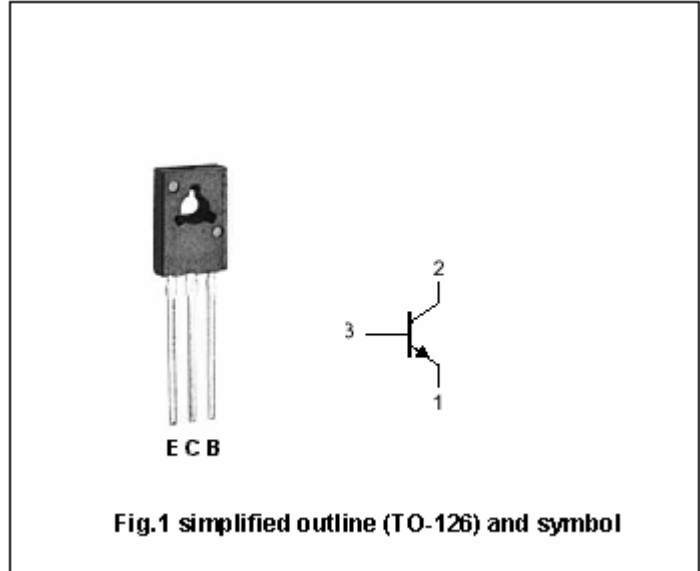
- With TO-126 package
- Complement to type 2SA1096/A
- High collector to emitter voltage V_{CEO}

APPLICATIONS

- For low-frequency power amplification

PINNING

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

Absolute maximum ratings($T_a=25^\circ\text{C}$)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	Open emitter	70	V
V_{CEO}	Collector- emitter voltage	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	$T_C=25^\circ\text{C}$	1.2^{*1}	W
			5^{*2}	
T_j	Junction temperature		150	$^\circ\text{C}$
T_{stg}	Storage temperature		$-55^\circ\text{C}+150^\circ\text{C}$	$^\circ\text{C}$

Note) *1: Without heat sink

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

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CHARACTERISTICS

Tj=25°C unless otherwise specified

SYMBOL	PARAMETER		CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)CEO}$	Collector-emitter breakdown voltage	2SC2497	$I_C=2mA ; I_B=0$	50			V
		2SC2497A		60			
$V_{(BR)CBO}$	Collector-base breakdown voltage		$I_C=1mA ; I_E=0$	70			V
V_{CEsat}	Collector-emitter saturation voltage		$I_C=1.5A ; I_B=0.15A$			1.0	V
V_{BEsat}	Base-emitter saturation voltage		$I_C=1.5A ; I_B=0.15A$			1.5	V
I_{CEO}	Collector cut-off current		$V_{CE}=10V ; I_B=0$			100	μA
I_{CBO}	Collector cut-off current		$V_{CB}=20V ; I_E=0$			1	μA
I_{EBO}	Emitter cut-off current		$V_{EB}=5V ; I_C=0$			10	μA
h_{FE}	DC current gain		$I_C=1A ; V_{CE}=5V$	80		220	
C_{OB}	Output capacitance		$I_E=0 ; V_{CB}=20V, f=1MHz$		35		pF
f_T	Transition frequency		$I_E=0.5A ; V_{CB}=5V, f=200MHz$		150		MHz

◆ h_{FE} Classifications

R	S
80-160	120-220

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PACKAGE OUTLINE

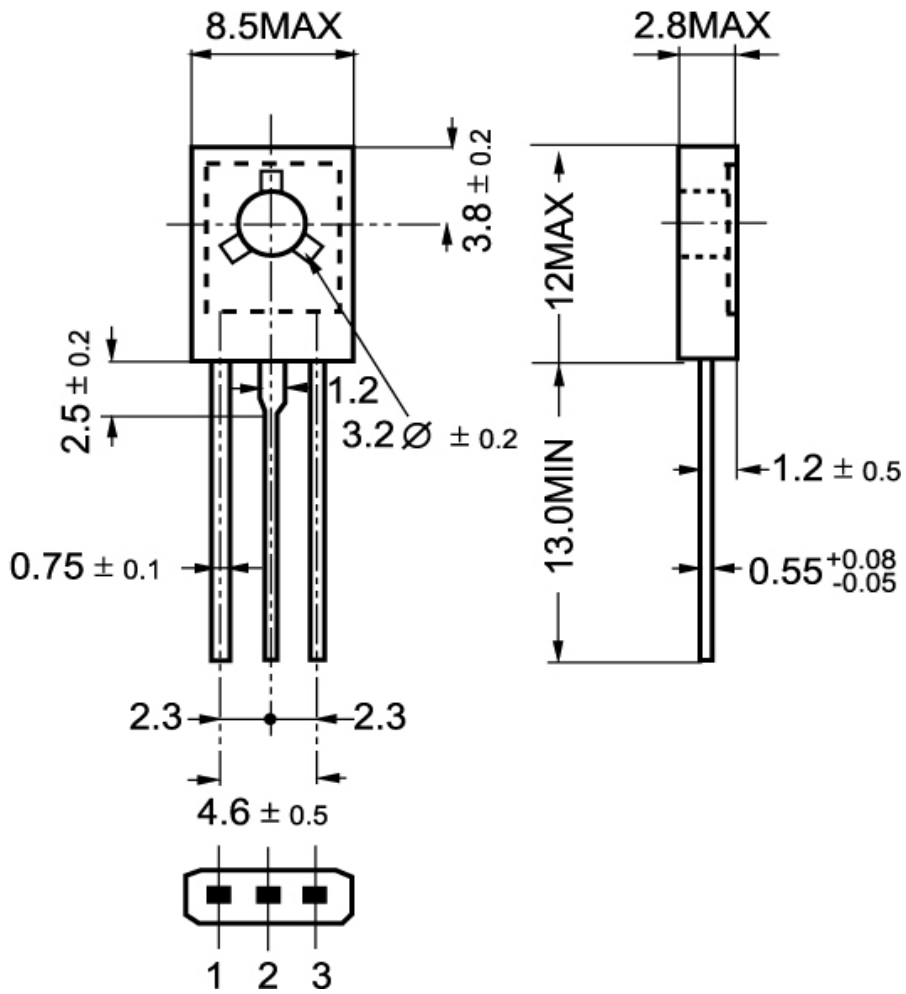


Fig.2 Outline dimensions