

## Silicon PNP Power Transistors

2SB743

## DESCRIPTION

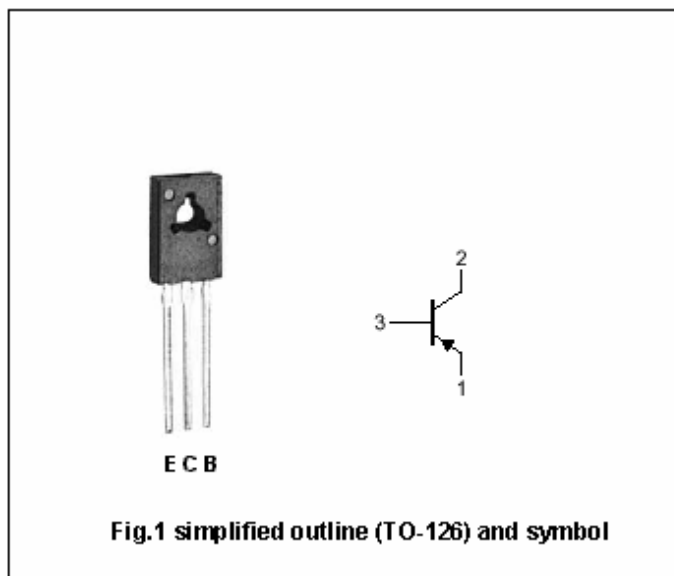
- With TO-126 package
- Low collector saturation voltage
- Excellent  $h_{FE}$  linearity

## APPLICATIONS

- For audio frequency power amplifier and general purpose applications

## 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	-40	V
$V_{CEO}$	Collector-emitter voltage	Open base	-30	V
$V_{EBO}$	Emitter-base voltage	Open collector	-5	V
$I_C$	Collector current (DC)		-3	A
$I_{CM}$	Collector current-Peak		-5	A
$I_B$	Base current		-0.6	A
$P_C$	Collector power dissipation	$T_a=25^\circ\text{C}$	1.0	W
		$T_C=25^\circ\text{C}$	10	
$T_j$	Junction temperature		150	$^\circ\text{C}$
$T_{stg}$	Storage temperature		-55~150	$^\circ\text{C}$

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## CHARACTERISTICS

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

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V <sub>(BR)CEO</sub>	Collector-emitter breakdown voltage	I <sub>C</sub> =-10mA; I <sub>B</sub> =0	-30			V
V <sub>CEsat</sub>	Collector-emitter saturation voltage	I <sub>C</sub> =-1.5A; I <sub>B</sub> =-0.15A			-2.0	V
V <sub>BEsat</sub>	Base-emitter saturation voltage	I <sub>C</sub> =-1.5A; I <sub>B</sub> =-0.15A			-2.0	V
I <sub>CBO</sub>	Collector cut-off current	V <sub>CB</sub> =-40V; I <sub>E</sub> =0			-1	μ A
I <sub>EBO</sub>	Emitter cut-off current	V <sub>EB</sub> =-5V; I <sub>C</sub> =0			-1	μ A
h <sub>FE-1</sub>	DC current gain	I <sub>C</sub> =-20mA; V <sub>CE</sub> =-5V	30			
h <sub>FE-2</sub>	DC current gain	I <sub>C</sub> =-1A; V <sub>CE</sub> =-5V	60		320	
f <sub>T</sub>	Transition frequency	I <sub>C</sub> =-0.1A; V <sub>CE</sub> =-5V		55		MHz

PACKAGE OUTLINE

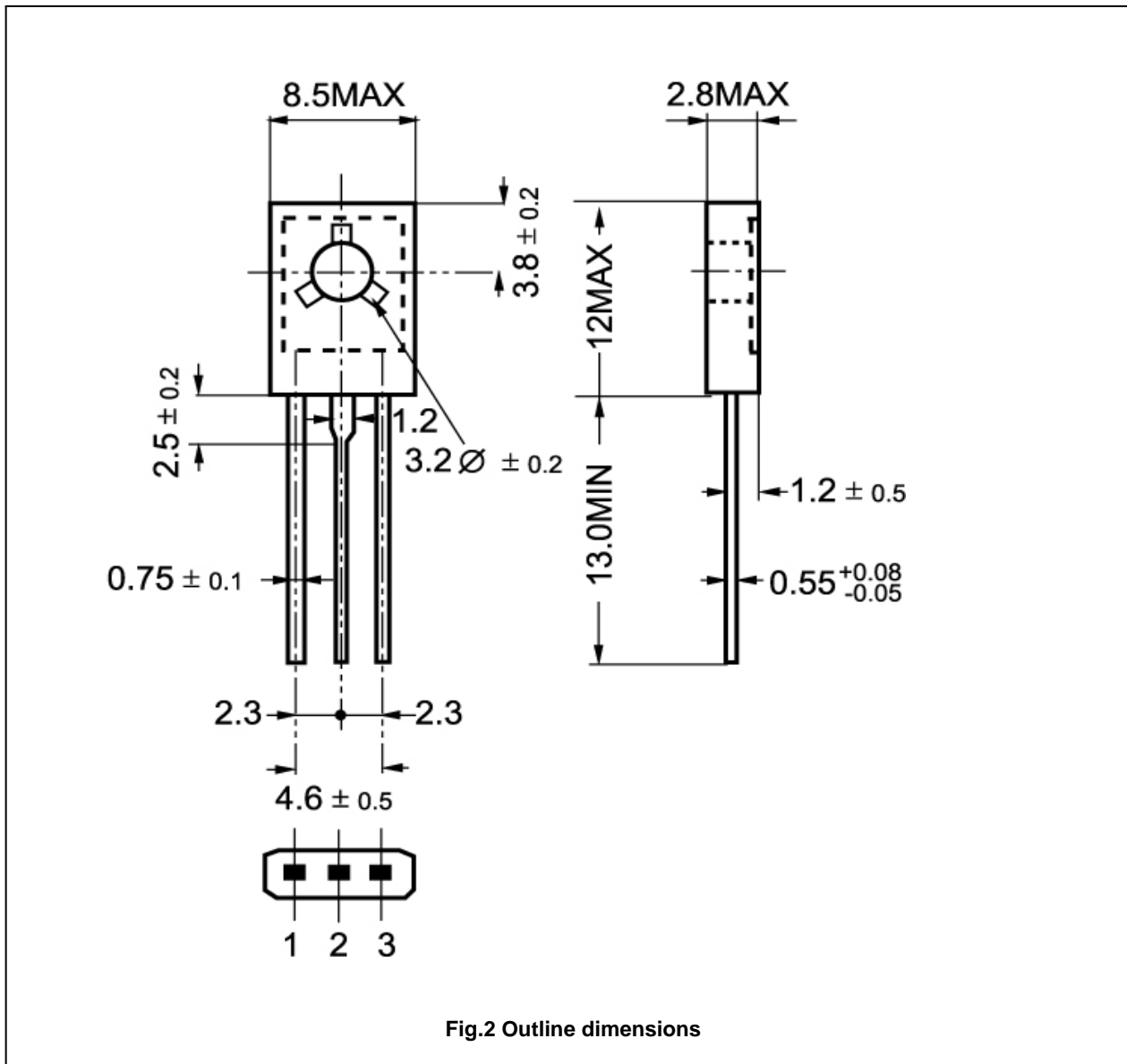


Fig.2 Outline dimensions