

## Silicon PNP Power Transistors

2SB1075

## DESCRIPTION

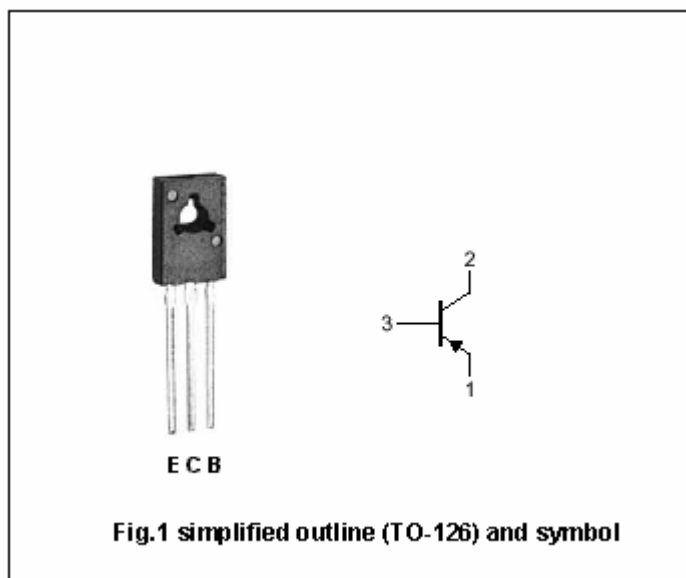
- With TO-126 package
- High collector-peak current
- Low collector saturation voltage

## APPLICATIONS

- For audio frequency output amplifier 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	-50	V
$V_{CEO}$	Collector-emitter voltage	Open base	-40	V
$V_{EBO}$	Emitter-base voltage	Open collector	-5	V
$I_C$	Collector current (DC)		-2	A
$I_{CM}$	Collector current-Peak		-4	A
$P_D$	Total power dissipation	$T_a=25^\circ\text{C}$	1.2	W
$T_j$	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> =-2mA ; I <sub>B</sub> =0	-40			V
V <sub>(BR)CBO</sub>	Collector-base breakdown voltage	I <sub>C</sub> =-1mA ; I <sub>E</sub> =0	-50			V
V <sub>CEsat</sub>	Collector-emitter saturation voltage	I <sub>C</sub> =-3.0A ; I <sub>B</sub> =-0.3A <sup>*2</sup>			-1.0	V
V <sub>BEsat</sub>	Base-emitter saturation voltage	I <sub>C</sub> =-2.0A ; I <sub>B</sub> =-0.2A <sup>*2</sup>			-1.5	V
I <sub>CBO</sub>	Collector cut-off current	V <sub>CB</sub> =-50V ; I <sub>E</sub> =0			-1	μA
I <sub>CEO</sub>	Collector cut-off current	V <sub>CE</sub> =-10V ; I <sub>E</sub> =0			-100	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 <sup>*2</sup>	50		220	
f <sub>T</sub>	Transition frequency	I <sub>C</sub> =-0.5A ; V <sub>CE</sub> =-5V <sup>*2</sup>		150		MHz
C <sub>OB</sub>	Collector output capacitance	I <sub>E</sub> =0 ; f=1MHz ; V <sub>CB</sub> =-20V		40		pF

Note: <sup>\*2</sup> pulse test◆ h<sub>FE</sub> Classifications

P	Q	R
50-100	80-160	120-220

PACKAGE OUTLINE

