

Silicon NPN Power Transistors

2SC2270

DESCRIPTION

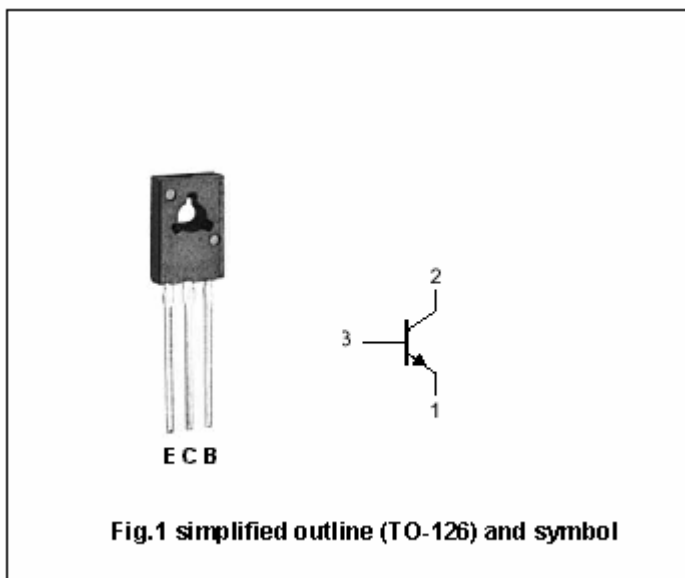
- With TO-126 package
- Low collector saturation voltage
- High collector power dissipation

APPLICATIONS

- Strobo flash applications
- Medimum power amplifier applications

PINNING

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



Absolute maximum ratings(Ta=25°C)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V <sub>CBO</sub>	Collector-base voltage	Open emitter	50	V
V <sub>CEO</sub>	Collector-emitter voltage	Open base	20	V
V <sub>EBO</sub>	Emitter-base voltage	Open collector	8	V
I <sub>C</sub>	Collector current (DC)		5	A
I <sub>CM</sub>	Collector current-peak		8	A
I <sub>E</sub>	Emitter current (DC)		-5	A
I <sub>EM</sub>	Emitter current-peak		-8	A
P <sub>C</sub>	Total power dissipation	T <sub>a</sub> =25°C	1.0	W
		T <sub>C</sub> =25°C	10	
T <sub>j</sub>	Junction temperature		150	°C
T <sub>stg</sub>	Storage temperature		-55~150	°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	20			V
V <sub>(BR)EBO</sub>	Emitter-base breakdown voltage	I <sub>E</sub> =1mA ; I <sub>C</sub> =0	8			V
V <sub>CEsat</sub>	Collector-emitter saturation voltage	I <sub>C</sub> =4A; I <sub>B</sub> =0.1A			1.0	V
V <sub>BE</sub>	Base-emitter voltage	I <sub>C</sub> =4A ; V <sub>CE</sub> =2V			1.5	V
I <sub>CBO</sub>	Collector cut-off current	V <sub>CB</sub> =40V; I <sub>E</sub> =0			0.1	μA
I <sub>EBO</sub>	Emitter cut-off current	V <sub>EB</sub> =8V; I <sub>C</sub> =0			0.1	μA
h <sub>FE-1</sub>	DC current gain	I <sub>C</sub> =0.5A ; V <sub>CE</sub> =2V	140		450	
h <sub>FE-2</sub>	DC current gain	I <sub>C</sub> =4A ; V <sub>CE</sub> =2V	70			
f <sub>T</sub>	Transition frequency	I <sub>C</sub> =0.5A ; V <sub>CE</sub> =2V		100		MHz
C <sub>OB</sub>	Collector output capacitance	I <sub>E</sub> =0;f=1MHz ; V <sub>CB</sub> =10V		40		pF

◆ h<sub>FE-1</sub> Classifications

A	B	C
140-240	200-330	300-450

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PACKAGE OUTLINE

