

Silicon NPN Power Transistors

2SC2270

DESCRIPTION

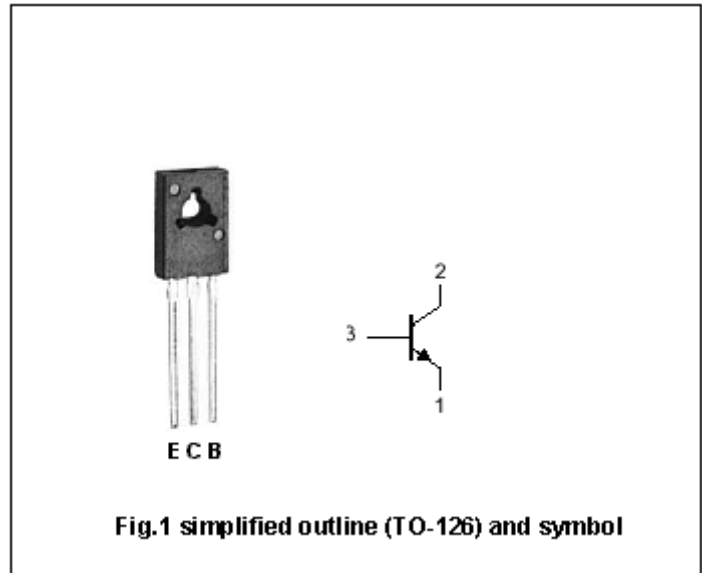
- With TO-126 package
- Low collector saturation voltage
- High collector power dissipation

APPLICATIONS

- Strobo flash applications
- Medium power 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	20	V
V_{EBO}	Emitter-base voltage	Open collector	8	V
I_C	Collector current (DC)		5	A
I_{CM}	Collector current-peak		8	A
I_E	Emitter current (DC)		-5	A
I_{EM}	Emitter current-peak		-8	A
P_C	Total 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_j=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{(BR)CEO}	Collector-emitter breakdown voltage	I _C =10mA ; I _B =0	20			V
V _{(BR)EBO}	Emitter-base breakdown voltage	I _E =1mA ; I _C =0	8			V
V _{CEsat}	Collector-emitter saturation voltage	I _C =4A; I _B =0.1A			1.0	V
V _{BE}	Base-emitter voltage	I _C =4A ; V _{CE} =2V			1.5	V
I _{CBO}	Collector cut-off current	V _{CB} =40V; I _E =0			0.1	μ A
I _{EBO}	Emitter cut-off current	V _{EB} =8V; I _C =0			0.1	μ A
h _{FE-1}	DC current gain	I _C =0.5A ; V _{CE} =2V	140		450	
h _{FE-2}	DC current gain	I _C =4A ; V _{CE} =2V	70			
f _T	Transition frequency	I _C =0.5A ; V _{CE} =2V		100		MHz
C _{OB}	Collector output capacitance	I _E =0; f=1MHz ; V _{CB} =10V		40		pF

◆ h_{FE-1} Classifications

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

PACKAGE OUTLINE

