

## Silicon NPN Power Transistors

2SC2246

## DESCRIPTION

- With TO-3 package
- High voltage ,high speed

## APPLICATIONS

- Power switching
- Power amplification
- power driver

## PINNING (See Fig.2)

PIN	DESCRIPTION
1	Base
2	Emitter
3	Collector

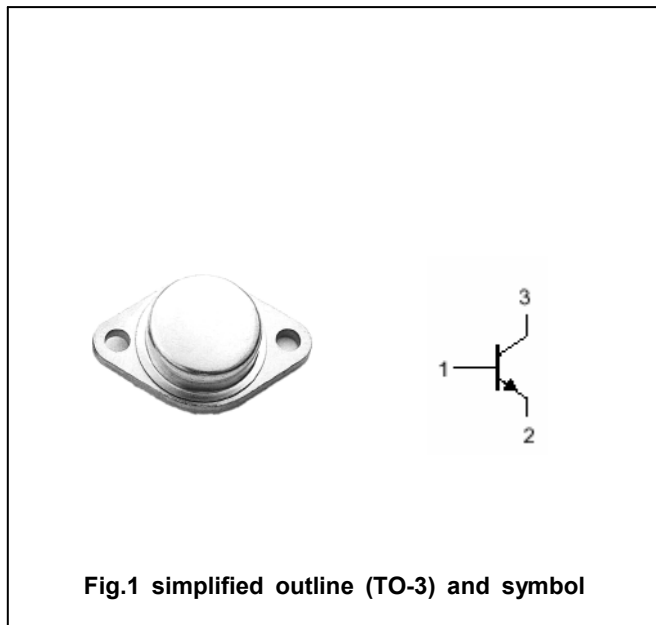


Fig.1 simplified outline (TO-3) and symbol

Absolute maximum ratings( $T_a=25^\circ$ )

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
$V_{CBO}$	Collector-base voltage	Open emitter	450	V
$V_{CEO}$	Collector-emitter voltage	Open base	400	V
$V_{EBO}$	Emitter-base voltage	Open collector	5	V
$I_C$	Collector current		15	A
$I_{CM}$	Collector current-peak		30	A
$I_B$	Base current		6	A
$P_T$	Total power dissipation	$T_{mb}=25^\circ$	100	W
$T_j$	Junction temperature		200	$^\circ$
$T_{stg}$	Storage temperature		-65~200	$^\circ$

## THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	VALUE	UNIT
$R_{th\ j-mb}$	Thermal resistance from junction to mounting base	1.0	$^\circ/W$

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## CHARACTERISTICS

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

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V <sub>CEO(SUS)</sub>	Collector-emitter sustaining voltage	I <sub>C</sub> =0.1A ; L=25mH	400			V
V <sub>CEsat</sub>	Collector-emitter saturation voltage	I <sub>C</sub> =6A; I <sub>B</sub> =1.2A			1.2	V
V <sub>BEsat</sub>	Base-emitter saturation voltage	I <sub>C</sub> =6A ; I <sub>B</sub> =1.2A			1.5	V
I <sub>CBO</sub>	Collector cut-off current	V <sub>CB</sub> =450V; I <sub>E</sub> =0 T <sub>C</sub> =125°C			1 4	mA
I <sub>CEO</sub>	Collector cut-off current	V <sub>CE</sub> =400V; I <sub>B</sub> =0			5.0	mA
I <sub>EBO</sub>	Emitter cut-off current	V <sub>EB</sub> =5V; I <sub>C</sub> =0			1.0	mA
h <sub>FE</sub>	DC current gain	I <sub>C</sub> =6A ; V <sub>CE</sub> =5V	10			

## Switching times

t <sub>on</sub>	Turn-on time	I <sub>C</sub> =6A ; I <sub>B1</sub> =- I <sub>B2</sub> =1.2A			1.0	μs
t <sub>s</sub>	Storage time				2.0	μs
t <sub>f</sub>	Fall time				1.0	μs

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PACKAGE OUTLINE



Fig.2 Outline dimensions