

## Silicon NPN Power Transistors

2SD536

## DESCRIPTION

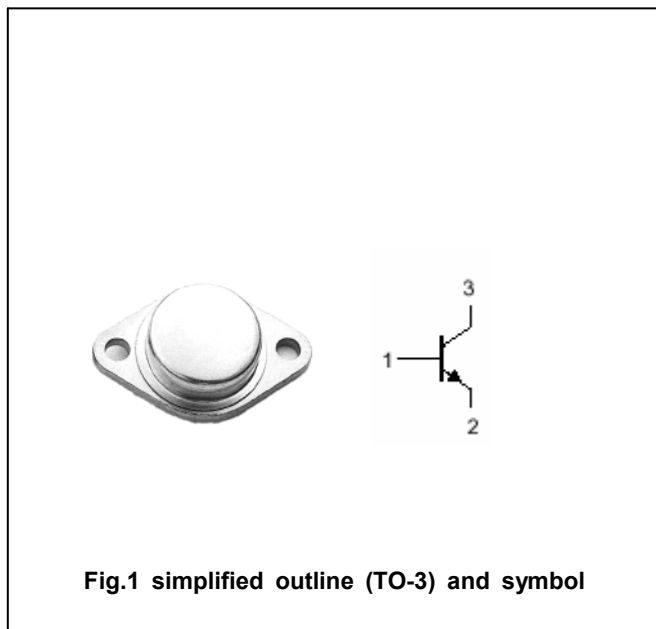
- With TO-3 package
- High voltage,high speed
- Low collector saturation voltage

## APPLICATIONS

- Switching regulators
- DC-DC converters
- General purpose power amplifiers

## PINNING(see Fig.2)

PIN	DESCRIPTION
1	Base
2	Emitter
3	Collector

Absolute maximum ratings( $T_a = \square$ )

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
$V_{CBO}$	Collector-base voltage	Open emitter	200	V
$V_{CEO}$	Collector-emitter voltage	Open base	200	V
$V_{EBO}$	Emitter-base voltage	Open collector	5	V
$I_C$	Collector current		10	A
$I_B$	Base current		5	A
$P_C$	Collector power dissipation	$T_C = 25 \square$	100	W
$T_j$	Junction temperature		150	$\square$
$T_{stg}$	Storage temperature		-55~150	$\square$

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## CHARACTERISTICS

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

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V <sub>CE0(SUS)</sub>	Collector-emitter sustaining voltage	I <sub>C</sub> =100mA ; I <sub>B</sub> =0	200			V
V <sub>(BR)CBO</sub>	Collector-base breakdown voltage	I <sub>C</sub> =0.1mA ; I <sub>E</sub> =0	200			V
V <sub>(BR)EBO</sub>	Emitter-base breakdown voltage	I <sub>E</sub> =0.1mA ; I <sub>C</sub> =0	5			V
V <sub>CEsat</sub>	Collector-emitter saturation voltage	I <sub>C</sub> =5A ; I <sub>B</sub> =1A			1.0	V
V <sub>BEsat</sub>	Base-emitter saturation voltage	I <sub>C</sub> =5A ; I <sub>B</sub> =1A			1.5	V
I <sub>CBO</sub>	Collector cut-off current	V <sub>CB</sub> =200V ; I <sub>E</sub> =0			0.1	mA
I <sub>EBO</sub>	Emitter cut-off current	V <sub>EB</sub> =5V ; I <sub>C</sub> =0			0.1	mA
h <sub>FE</sub>	DC current gain	I <sub>C</sub> =5A ; V <sub>CE</sub> =5V	50			

PACKAGE OUTLINE

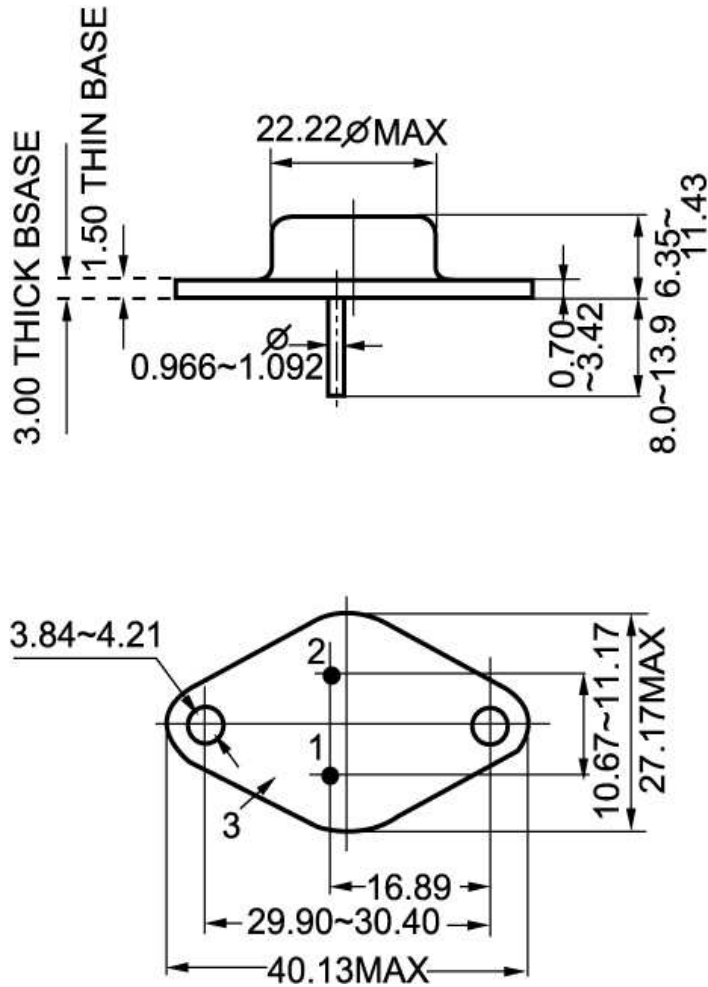


Fig.2 outline dimensions (unindicated tolerance:±0.1mm)