

## Silicon NPN Power Transistors

## 2SC1445

## DESCRIPTION

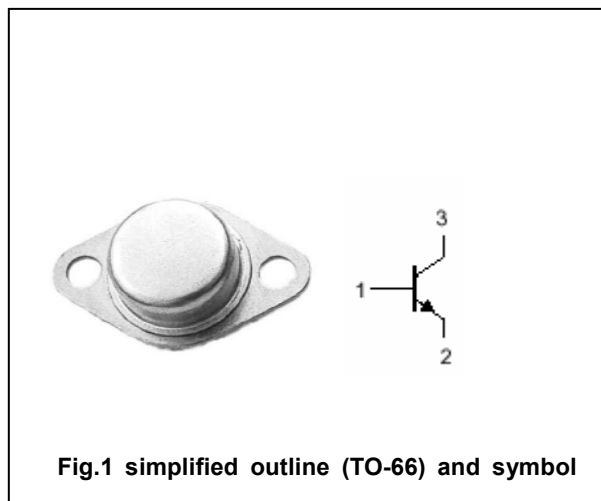
- With TO-66 package
- Excellent safe operating area
- Low collector saturation voltage

## APPLICATIONS

- For switching and wide-band amplifier applications.

## 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	100	V
$V_{CEO}$	Collector-emitter voltage	Open base	80	V
$V_{EBO}$	Emitter-base voltage	Open collector	6	V
$I_C$	Collector current		6	A
$I_B$	Base current		1	A
$P_D$	Total power dissipation	$T_C = 25 \square$	40	W
$T_j$	Junction temperature		150	$\square$
$T_{stg}$	Storage temperature		-65~200	$\square$

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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	80			V
V <sub>CEsat-1</sub>	Collector-emitter saturation voltage	I <sub>C</sub> =2A ; I <sub>B</sub> =0.2A			0.7	V
V <sub>CEsat-2</sub>	Collector-emitter saturation voltage	I <sub>C</sub> =6A ; I <sub>B</sub> =0.6A			1.2	V
V <sub>BE sat-1</sub>	Base-emitter saturation voltage	I <sub>C</sub> =2A ; I <sub>B</sub> =0.2A			1.2	V
V <sub>BE sat-2</sub>	Base-emitter saturation voltage	I <sub>C</sub> =6A ; I <sub>B</sub> =0.6A			2.0	V
I <sub>CB0</sub>	Collector cut-off current	V <sub>CB</sub> =100V ; I <sub>E</sub> =0			0.1	mA
I <sub>EB0</sub>	Emitter cut-off current	V <sub>EB</sub> =6V ; I <sub>C</sub> =0			0.1	mA
h <sub>FE</sub>	DC current gain	I <sub>C</sub> =1A ; V <sub>CE</sub> =4V	30			
f <sub>T</sub>	Transition frequency	I <sub>C</sub> =0.5A ; V <sub>CE</sub> =10V		10		MHz

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PACKAGE OUTLINE



Fig.2 outline dimensions