

## Silicon NPN Power Transistors

2N5264

## DESCRIPTION

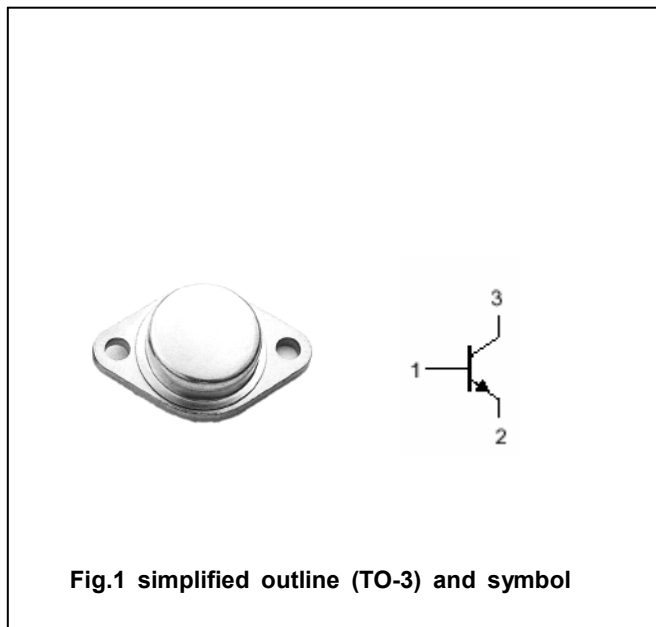
- With TO-3 package
- High speed switching
- High reliability

## APPLICATIONS

- Switching regulators
- DC-DC convertor
- Solid state relay
- General purpose power amplifiers

## PINNING (See Fig.2)

PIN	DESCRIPTION
1	Base
2	Emitter
3	Collector

MAXIMUM RATINGS( $T_a=25^\circ\text{C}$ )

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
$V_{CBO}$	Collector-base voltage	Open emitter	300	V
$V_{CEO}$	Collector-emitter voltage	Open base	180	V
$V_{EBO}$	Emitter-base voltage	Open collector	7	V
$I_C$	Collector current		7	A
$I_B$	Base current		2	A
$P_T$	Total power dissipation	$T_c=25^\circ\text{C}$	87	W
$T_j$	Junction temperature		165	$^\circ\text{C}$
$T_{stg}$	Storage temperature		-65~200	$^\circ\text{C}$

## THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j-c}$	Thermal resistance from junction to case	1.0	$^\circ\text{C}/\text{W}$

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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 ; I <sub>B</sub> =0	180			V
V <sub>CEsat</sub>	Collector-emitter saturation voltage	I <sub>C</sub> =7A; I <sub>B</sub> =1.4A			1.5	V
V <sub>BEsat</sub>	Base-emitter saturation voltage	I <sub>C</sub> =7A; I <sub>B</sub> =1.4A			1.2	V
I <sub>CBO</sub>	Collector cut-off current	V <sub>CB</sub> =300V; I <sub>E</sub> =0			1	mA
I <sub>EBO</sub>	Emitter cut-off current	V <sub>EB</sub> =7V; I <sub>C</sub> =0			0.1	mA
h <sub>FE</sub>	DC current gain	I <sub>C</sub> =1A ; V <sub>CE</sub> =5V	30		300	
f <sub>T</sub>	Transition frequency	I <sub>C</sub> =1A ; V <sub>CE</sub> =10V	50			MHz

PACKAGE OUTLINE

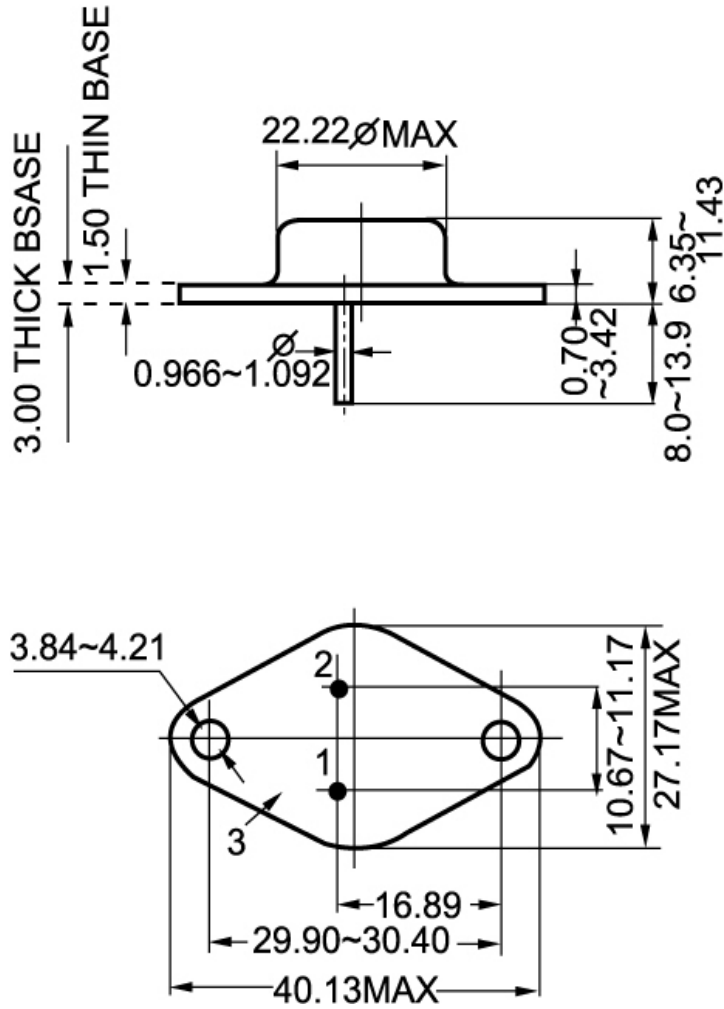


Fig.2 Outline dimensions