

## Silicon NPN Power Transistors

2N6259

## DESCRIPTION

- With TO-3 package
- Low collector saturation voltage
- High power dissipation

## APPLICATIONS

- Designed for high power audio ,disk head positioners,linear amplifiers,switching regulators solenoid drivers,and DC-DC converters or inverters

## PINNING

PIN	DESCRIPTION
1	Base
2	Emitter
3	Collector

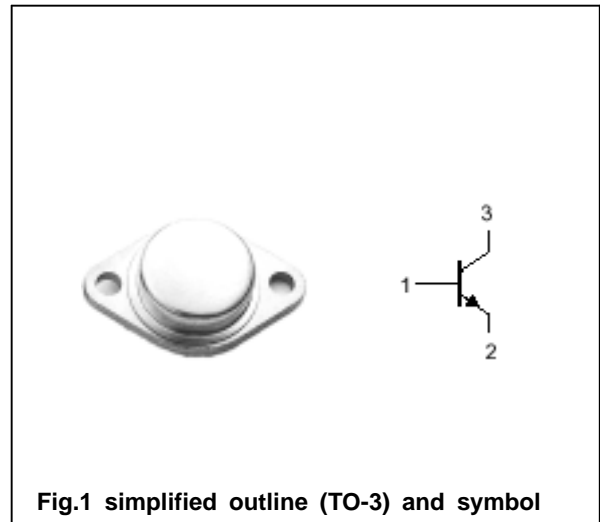


Fig.1 simplified outline (TO-3) and symbol

Absolute maximum ratings( $T_a = 25^\circ\text{C}$ )

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
$V_{CBO}$	Collector-base voltage	Open emitter	170	V
$V_{CEO}$	Collector-emitter voltage	Open base	150	V
$V_{EBO}$	Emitter-base voltage	Open collector	7	V
$I_C$	Collector current		16	A
$I_{CM}$	Collector current-peak		30	A
$I_B$	Base current		4	A
$I_{BM}$	Base current-peak		15	A
$P_D$	Total Power Dissipation	$T_C=25$	150	W
$T_j$	Junction temperature		200	
$T_{stg}$	Storage temperature		-65~200	

## THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	VALUE	UNIT
$R_{th\ j-c}$	Thermal resistance junction to case	1.17	/W

## Silicon NPN Power Transistors

## 2N6259

## CHARACTERISTICS

T<sub>j</sub>=25 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	150			V
V <sub>CEsat-1</sub>	Collector-emitter saturation voltage	I <sub>C</sub> =8A ; I <sub>B</sub> =0.8A			1.5	V
V <sub>CEsat-2</sub>	Collector-emitter saturation voltage	I <sub>C</sub> =16A ; I <sub>B</sub> =3.2A			2.5	V
V <sub>BE</sub>	Base-emitter on voltage	I <sub>C</sub> =8A ; V <sub>CE</sub> =2V			2.0	V
I <sub>CEO</sub>	Collector cut-off current	V <sub>CE</sub> =130V ; I <sub>B</sub> =0			10	mA
I <sub>CEx</sub>	Collector cut-off current	V <sub>CE</sub> =150V ; V <sub>BE(off)</sub> =1.5V			2.0	mA
I <sub>CBO</sub>	Emitter cut-off current	V <sub>CB</sub> =150V ; I <sub>E</sub> =0			2.0	mA
I <sub>EBO</sub>	Emitter cut-off current	V <sub>EB</sub> =7V ; I <sub>C</sub> =0			5.0	mA
h <sub>FE-1</sub>	DC current gain	I <sub>C</sub> =8A ; V <sub>CE</sub> =2V	15		60	
h <sub>FE-2</sub>	DC current gain	I <sub>C</sub> =16A ; V <sub>CE</sub> =4V	10			

Silicon NPN Power Transistors

2N6259

PACKAGE OUTLINE

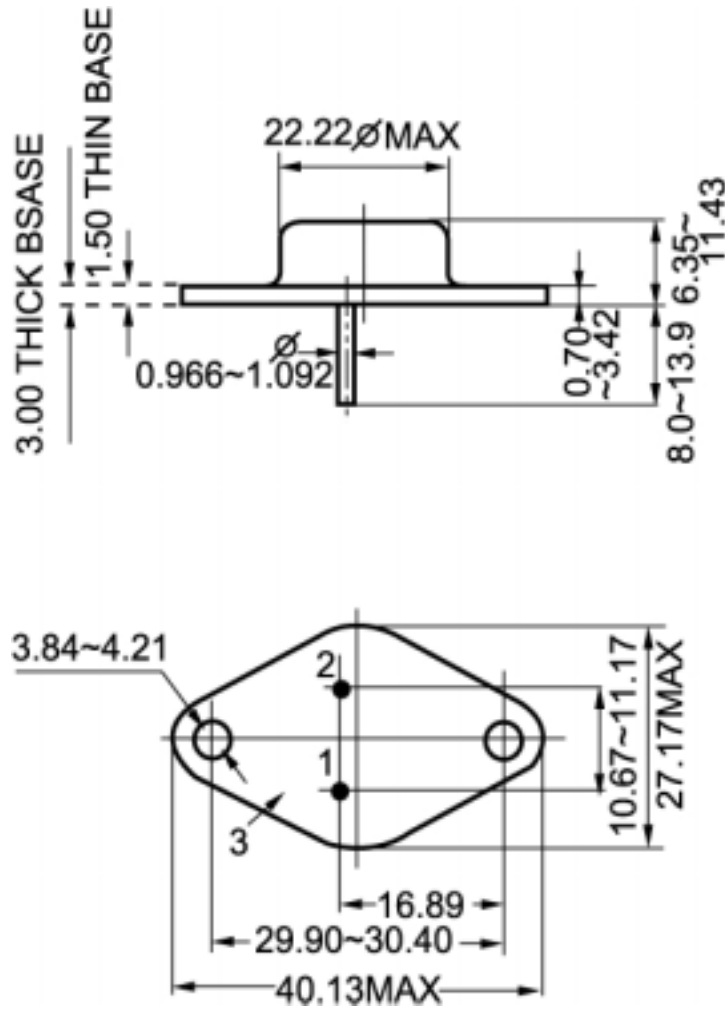


Fig.2 outline dimensions (unindicated tolerance:  $\pm 0.10$ mm)