

**Silicon NPN Power Transistors**

**2N6494**

**DESCRIPTION**

- With TO-3 package
- Low collector saturation voltage
- High DC current gain
- DARLINGTON

**APPLICATIONS**

- General-purpose power amplifier and low frequency swithing applications

**PINNING**

PIN	DESCRIPTION
1	Base
2	Emitter
3	Collector

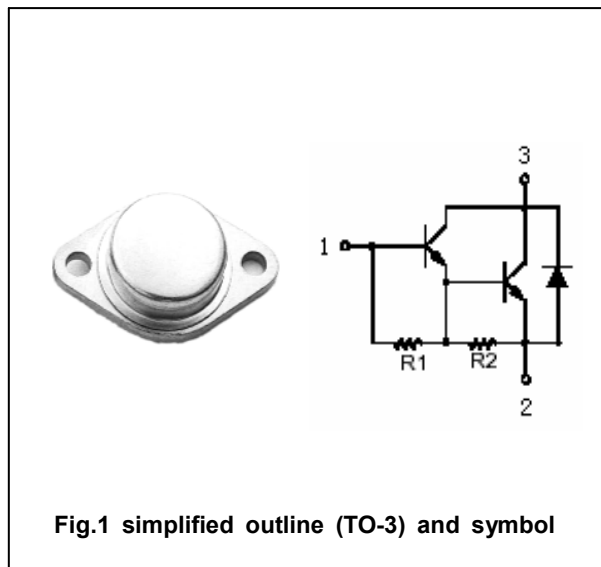


Fig.1 simplified outline (TO-3) and symbol

**Absolute maximum ratings(Ta=□)**

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V <sub>CBO</sub>	Collector-base voltage	Open emitter	100	V
V <sub>CEO</sub>	Collector-emitter voltage	Open base	80	V
V <sub>EBO</sub>	Emitter-base voltage	Open collector	5	V
I <sub>C</sub>	Collector current		15	A
P <sub>D</sub>	Total Power Dissipation	T <sub>C</sub> =25□	100	W
T <sub>j</sub>	Junction temperature		150	□
T <sub>stg</sub>	Storage temperature		-65~200	□

**THERMAL CHARACTERISTICS**

SYMBOL	PARAMETER	VALUE	UNIT
R <sub>th j-c</sub>	Thermal resistance junction to case	1.75	□/W

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## CHARACTERISTICS

T<sub>m</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> =0.1 A ; I <sub>B</sub> =0	80			V
V <sub>CEsat</sub>	Collector-emitter saturation voltage	I <sub>C</sub> =10A ; I <sub>B</sub> =100mA			3	V
V <sub>BEsat</sub>	Base-emitter saturation voltage	I <sub>C</sub> =10A ; I <sub>B</sub> =100mA			4	V
V <sub>BE</sub>	Base-emitter on voltage	I <sub>C</sub> =5A ; V <sub>CE</sub> =4V			2.8	V
I <sub>CEO</sub>	Collector cut-off current	V <sub>CE</sub> =60V ; I <sub>B</sub> =0			1.0	mA
I <sub>CEx</sub>	Collector cut-off current	V <sub>CE</sub> =100V ; V <sub>BE(off)</sub> =-1.5V			0.5	mA
I <sub>EBO</sub>	Emitter cut-off current	V <sub>EB</sub> =5V ; I <sub>C</sub> =0			3.0	mA
h <sub>FE-1</sub>	DC current gain	I <sub>C</sub> =5A ; V <sub>CE</sub> =4V	500			
h <sub>FE-2</sub>	DC current gain	I <sub>C</sub> =15A ; V <sub>CE</sub> =4V	100			

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PACKAGE OUTLINE



Fig.2 outline dimensions (unindicated tolerance:±0.10mm)