

Silicon PNP Power Transistors

TIP514

**DESCRIPTION**

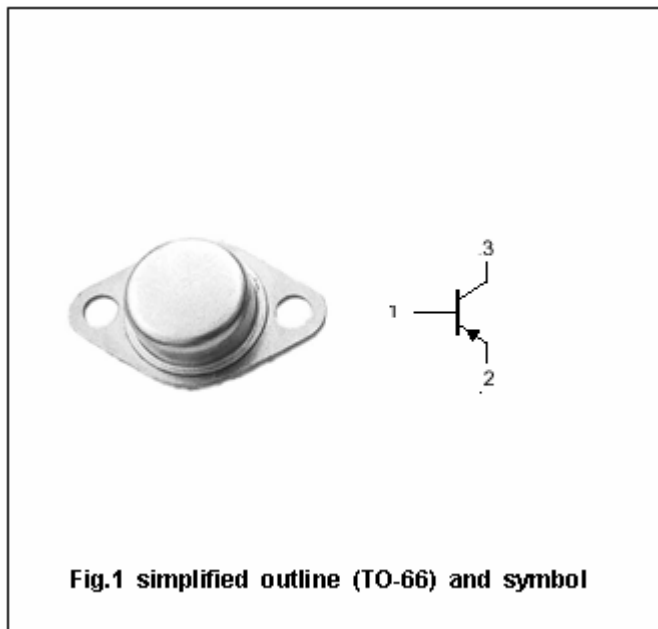
- With TO-66 package
- Low collector saturation voltage
- Wide area of safe operation

**APPLICATIONS**

- For use in high-frequency drivers
- In audio amplifiers

**PINNING (See Fig.2)**

PIN	DESCRIPTION
1	Base
2	Emitter
3	Collector



**ABSOLUTE MAXIMUM RATINGS(T<sub>c</sub>=25°C)**

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V <sub>CBO</sub>	Collector-base voltage	Open emitter	-150	V
V <sub>CEO</sub>	Collector-emitter voltage	Open base	-150	V
V <sub>EBO</sub>	Emitter-base voltage	Open collector	-5	V
I <sub>C</sub>	Collector current		-5	A
P <sub>D</sub>	Total power dissipation	T <sub>c</sub> =100°C	20	W
		T <sub>a</sub> =100°C	2	
T <sub>j</sub>	Junction temperature		175	°C
T <sub>stg</sub>	Storage temperature		-55~175	°C

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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> =-10mA ; I <sub>B</sub> =0	-150			V
V <sub>(BR)EBO</sub>	Emitter-base breakdown voltage	I <sub>E</sub> =-1mA ; I <sub>C</sub> =0	-5			V
V <sub>CE(sat)</sub>	Collector-emitter saturation voltage	I <sub>C</sub> =-5A; I <sub>B</sub> =-0.5A			-2.0	V
V <sub>BE(sat)</sub>	Base-emitter saturation voltage	I <sub>C</sub> =-5A; I <sub>B</sub> =-0.5A			-2.5	V
I <sub>CBO</sub>	Collector cut-off current	V <sub>CB</sub> =-150V; I <sub>E</sub> =0			-10	μA
I <sub>CEO</sub>	Collector cut-off current	V <sub>CE</sub> =-150V; I <sub>B</sub> =0			-100	μA
I <sub>EBO</sub>	Emitter cut-off current	V <sub>EB</sub> =-5V; I <sub>C</sub> =0			-10	μA
h <sub>FE</sub>	DC current gain	I <sub>C</sub> =-2.5A ; V <sub>CE</sub> =-4V	30		150	
f <sub>T</sub>	Transition frequency	I <sub>C</sub> =-0.5A ; V <sub>CE</sub> =-4V	40			MHz

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PACKAGE OUTLINE

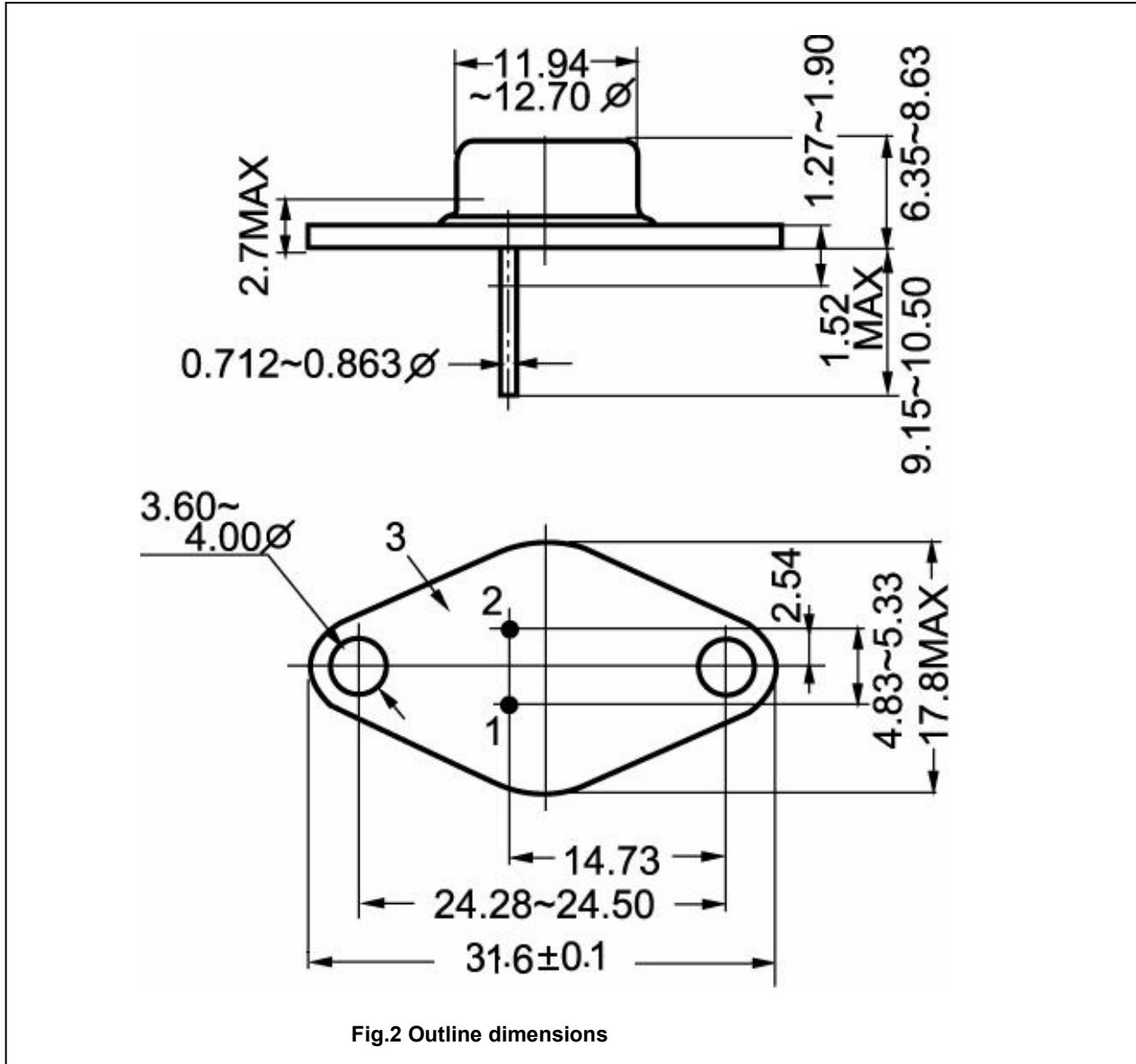


Fig.2 Outline dimensions