

Silicon PNP Power Transistors

TIP514

DESCRIPTION

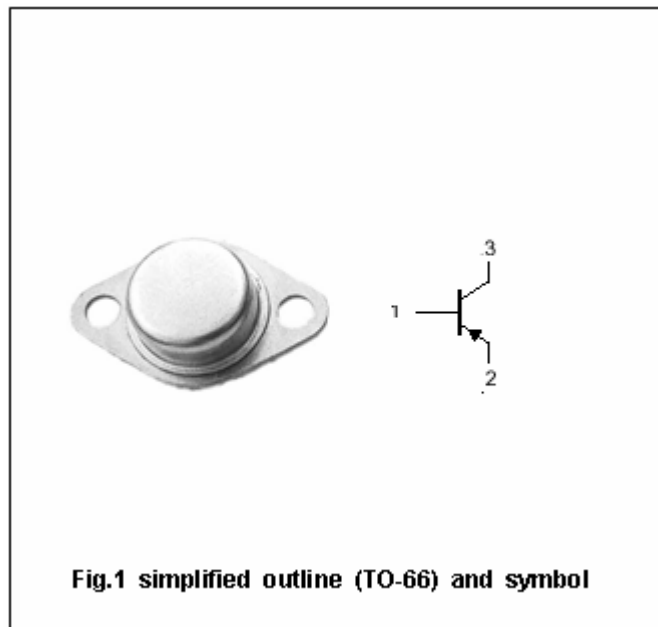
- With TO-66 package
- Low collector saturation voltage
- Wide area of safe operation

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($T_c=25^\circ\text{C}$)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	Open emitter	-150	V
V_{CEO}	Collector-emitter voltage	Open base	-150	V
V_{EBO}	Emitter-base voltage	Open collector	-5	V
I_C	Collector current		-5	A
P_D	Total power dissipation	$T_c=100^\circ\text{C}$	20	W
		$T_a=100^\circ\text{C}$	2	
T_j	Junction temperature		175	$^\circ\text{C}$
T_{stg}	Storage temperature		-55~175	$^\circ\text{C}$

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CHARACTERISTICS

Tj=25°C unless otherwise specified

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SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{CEO(SUS)}$	Collector-emitter sustaining voltage	$I_C = -10mA$; $I_B = 0$	-150			V
$V_{(BR)EBO}$	Emitter-base breakdown voltage	$I_E = -1mA$; $I_C = 0$	-5			V
$V_{CE(sat)}$	Collector-emitter saturation voltage	$I_C = -5A$; $I_B = -0.5A$			-2.0	V
$V_{BE(sat)}$	Base-emitter saturation voltage	$I_C = -5A$; $I_B = -0.5A$			-2.5	V
I_{CBO}	Collector cut-off current	$V_{CB} = -150V$; $I_E = 0$			-10	μA
I_{CEO}	Collector cut-off current	$V_{CE} = -150V$; $I_B = 0$			-100	μA
I_{EBO}	Emitter cut-off current	$V_{EB} = -5V$; $I_C = 0$			-10	μA
h_{FE}	DC current gain	$I_C = -2.5A$; $V_{CE} = -4V$	30		150	
f_T	Transition frequency	$I_C = -0.5A$; $V_{CE} = -4V$	40			MHz

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PACKAGE OUTLINE

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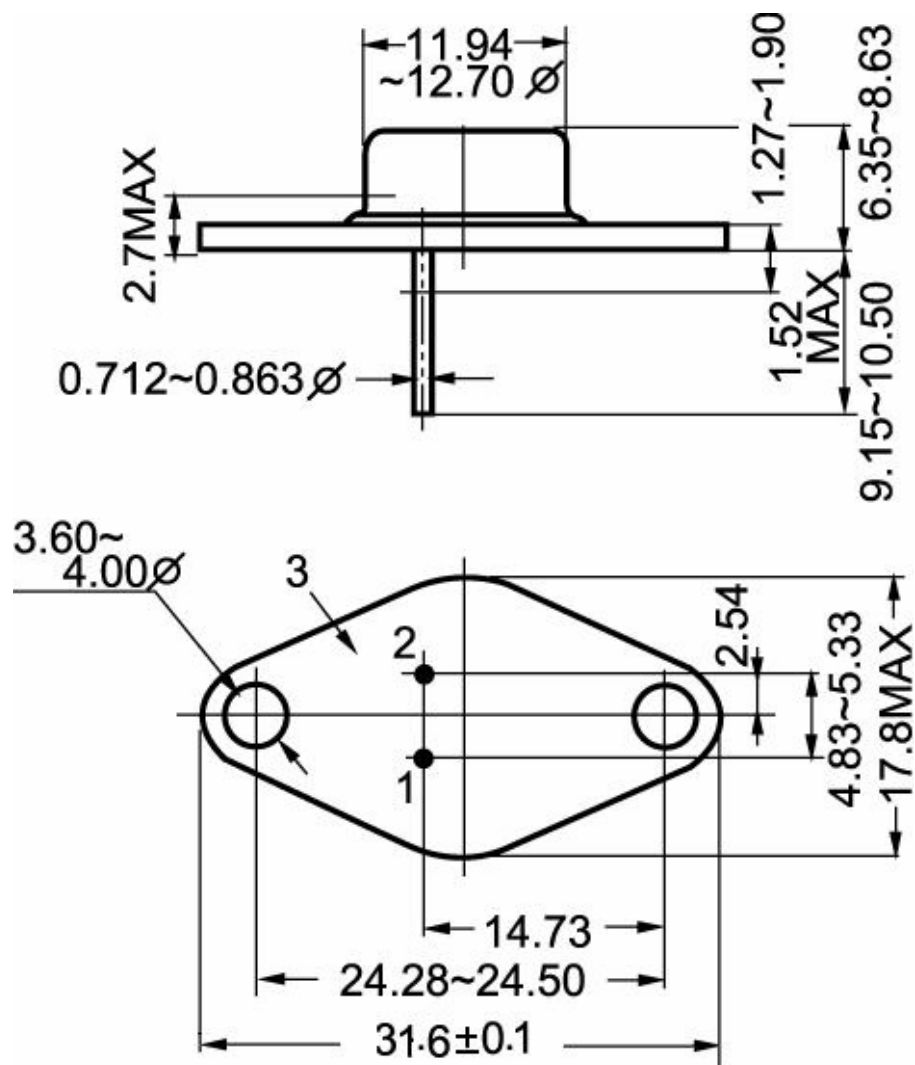


Fig.2 Outline dimensions