

SavantIC Semiconductor

Product Specification

Silicon NPN Power Transistors

2N3441

DESCRIPTION

- With TO-66 package
- Continuous collector current- $I_C=3A$
- Power dissipation - $P_D=25W @T_C=25^\circ C$

APPLICATIONS

For use in general-purpose switching and Linear amplifier applications such as:

- Driver for high power outputs
- Series and shunt regulators
- Audio and servo amplifiers
- Solenoid and relay drivers
- Power switching circuits

PINNING (See Fig.2)

PIN	DESCRIPTION
1	Base
2	Emitter
3	Collector

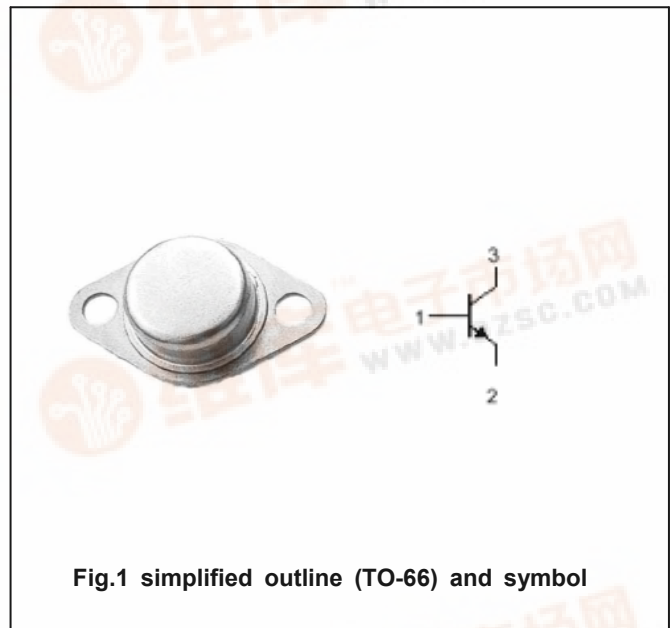


Fig.1 simplified outline (TO-66) and symbol

ABSOLUTE MAXIMUM RATINGS( $T_a=25^\circ C$ )

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
$V_{CBO}$	Collector-base voltage	Open emitter	160	V
$V_{CEO}$	Collector-emitter voltage	Open base	140	V
$V_{EBO}$	Emitter-base voltage	Open collector	7	V
$I_C$	Collector current		3	A
$I_B$	Base current		2	A
$P_D$	Total power dissipation	$T_C=25^\circ C$	25	W
$T_j$	Junction temperature		200	$^\circ C$
$T_{stg}$	Storage temperature		-65~200	$^\circ C$

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{(th) jc}$	Thermal resistance junction to case	7.0	$^\circ C/W$

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## CHARACTERISTICS

T<sub>j</sub>=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V <sub>CEQ(SUS)</sub>	Collector-emitter sustaining voltage	I <sub>C</sub> =100mA ; I <sub>B</sub> =0	140			V
V <sub>CE(sat)</sub>	Collector-emitter saturation voltage	I <sub>C</sub> =2.7A ; I <sub>B</sub> =0.9A			6.0	V
V <sub>BE(on)</sub>	Base -emitter on voltage	I <sub>C</sub> =2.7A ; V <sub>CE</sub> =4V			6.7	V
I <sub>CEX</sub>	Collector cut-off current	V <sub>CE</sub> =140V ; V <sub>BE(off)</sub> =1.5V V <sub>CE</sub> =140V ; V <sub>BE(off)</sub> =1.5V T <sub>C</sub> =150°C			5.0 6.0	mA
I <sub>CEO</sub>	Collector cut-off current	V <sub>CE</sub> =140V ; I <sub>B</sub> =0			10	mA
I <sub>EBO</sub>	Emitter cut-off current	V <sub>EB</sub> =7V ; I <sub>C</sub> =0			1.0	mA
h <sub>FE-1</sub>	DC current gain	I <sub>C</sub> =0.5A ; V <sub>CE</sub> =4V	25		100	
h <sub>FE-2</sub>	DC current gain	I <sub>C</sub> =2.7A ; V <sub>CE</sub> =4V	5			

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PACKAGE OUTLINE

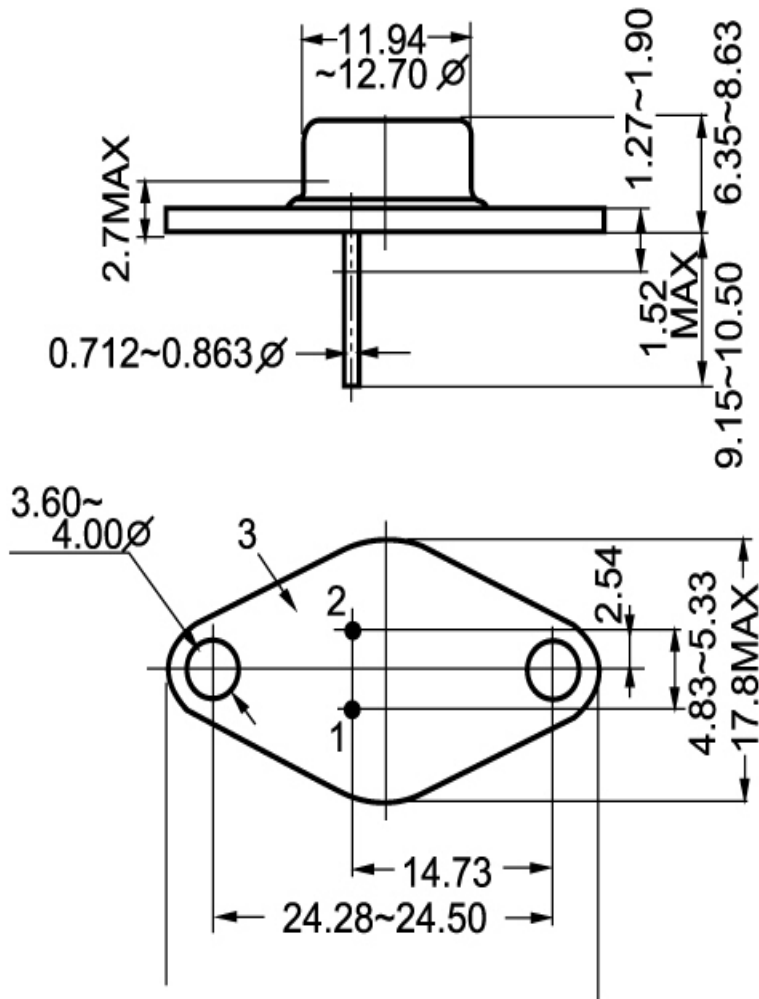


Fig.2 Outline dimensions