

Silicon NPN Power Transistors

2N5612A

DESCRIPTION

- With TO-66 package
- Excellent safe operating area
- Low collector saturation voltage

APPLICATIONS

- For general-purpose amplifier ;  
and switching applications

PINNING(see Fig.2)

PIN	DESCRIPTION
1	Base
2	Emitter
3	Collector

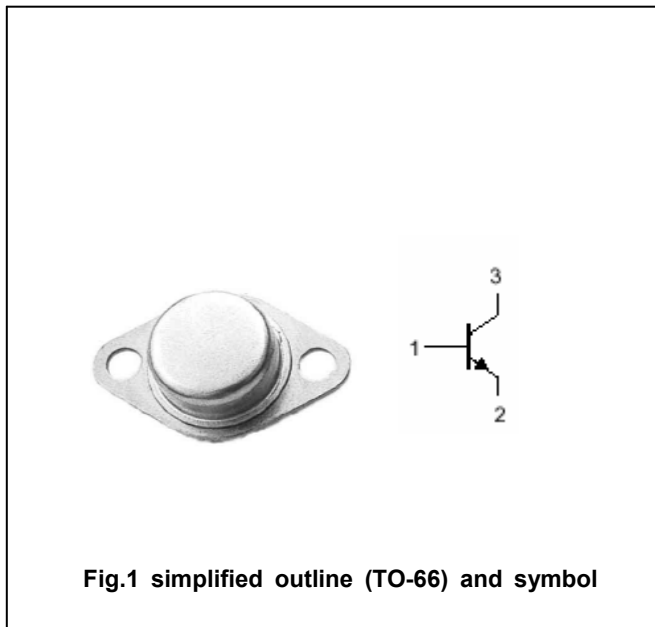


Fig.1 simplified outline (TO-66) and symbol

Absolute maximum ratings(Ta=□)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V <sub>CBO</sub>	Collector-base voltage	Open emitter	120	V
V <sub>CEO</sub>	Collector-emitter voltage	Open base	100	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> =25□	25	W
T <sub>j</sub>	Junction temperature		150	□
T <sub>stg</sub>	Storage temperature		-65~150	□

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	VALUE	UNIT
R <sub>th j-c</sub>	Thermal resistance junction to case	4.37	□/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> =50mA ; I <sub>B</sub> =0	100			V
V <sub>CEsat</sub>	Collector-emitter saturation voltage	I <sub>C</sub> =1A; I <sub>B</sub> =0.1A			0.5	V
V <sub>BE</sub>	Base-emitter on voltage	I <sub>C</sub> =2.5A ; V <sub>CE</sub> =5V			1.5	V
I <sub>CB0</sub>	Collector cut-off current	V <sub>CB</sub> =Rated V <sub>CB0</sub> ; I <sub>E</sub> =0			0.1	mA
I <sub>CEO</sub>	Collector cut-off current	V <sub>CE</sub> = Rated V <sub>CEO</sub> , I <sub>B</sub> =0			1.0	mA
I <sub>EBO</sub>	Emitter cut-off current	V <sub>EB</sub> =5V; I <sub>C</sub> =0			0.1	mA
h <sub>FE</sub>	DC current gain	I <sub>C</sub> =2.5A ; V <sub>CE</sub> =5V	30		150	
f <sub>T</sub>	Transition frequency	I <sub>C</sub> =0.5A ; V <sub>CE</sub> =10V	60			MHz

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PACKAGE OUTLINE

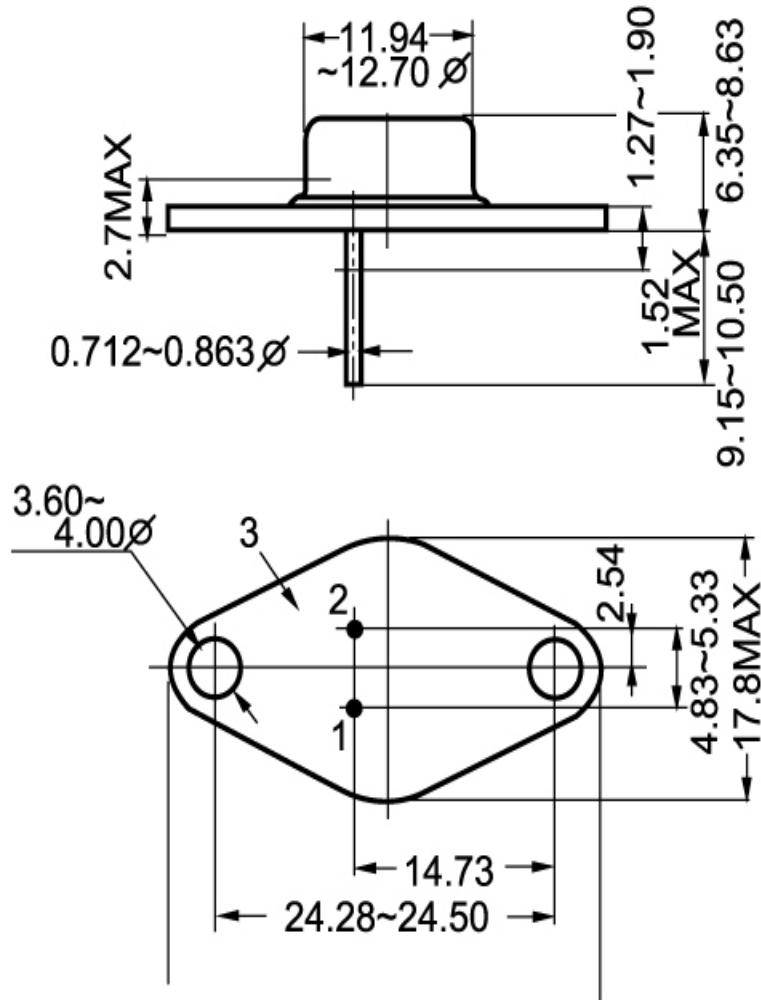


Fig.2 outline dimensions