

Silicon NPN Power Transistors

2N5498

DESCRIPTION

- With TO-3 package
- High DC current gain
- Low saturation voltage
- High Safe Operating Area

APPLICATIONS

- Designed for high power audio, disk head positioners and other linear applications.
- These devices can also be used in power switching circuits such as relay or solenoid drivers, DC-DC converters or inverters.

PINNING

PIN	DESCRIPTION
1	Base
2	Emitter
3	Collector

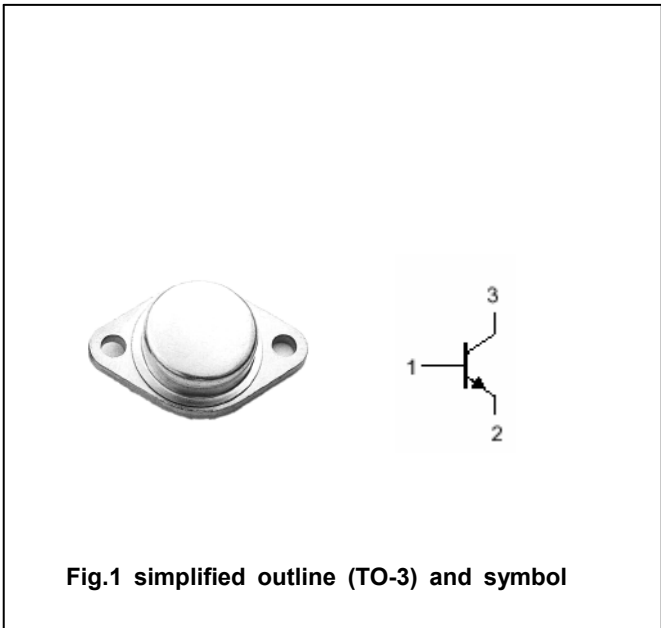


Fig.1 simplified outline (TO-3) and symbol

Absolute maximum ratings(Ta=□)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V _{CBO}	Collector-base voltage	Open emitter	150	V
V _{CEO}	Collector-emitter voltage	Open base	130	V
V _{EBO}	Emitter-base voltage	Open collector	7	V
I _C	Collector current		15	A
I _B	Base current		4	A
P _D	Total Power Dissipation	T _C =25□	200	W
T _j	Junction temperature		150	□
T _{stg}	Storage temperature		-65~200	□

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	VALUE	UNIT
R _{th j-c}	Thermal resistance junction to case	1.17	□/W

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CHARACTERISTICS

T_j=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{CEQ(SUS)}	Collector-emitter sustaining voltage	I _C =0.2A ; I _B =0	130			V
V _{CER}	Collector-emitter sustaining voltage	I _C =0.2A ; R _{BE} =100Ω	150			V
V _{CEsat-1}	Collector-emitter saturation voltage	I _C =8A ; I _B =0.8A			1.4	V
V _{CEsat-2}	Collector-emitter saturation voltage	I _C =15A ; I _B =3A			4.0	V
I _{CEO}	Collector cut-off current	V _{CE} =130V ; I _B =0			2.0	mA
I _{CEx}	Collector cut-off current	V _{CE} =130V ; V _{BE(off)} =1.5V T _C =150°C			2.0 10.0	mA
I _{EBO}	Emitter cut-off current	V _{EB} =7V ; I _C =0			1.0	mA
h _{FE}	DC current gain	I _C =15A ; V _{CE} =5V	10		50	
f _T	Transition frequency	I _C =1A ; V _{CE} =10V	1			MHz

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PACKAGE OUTLINE

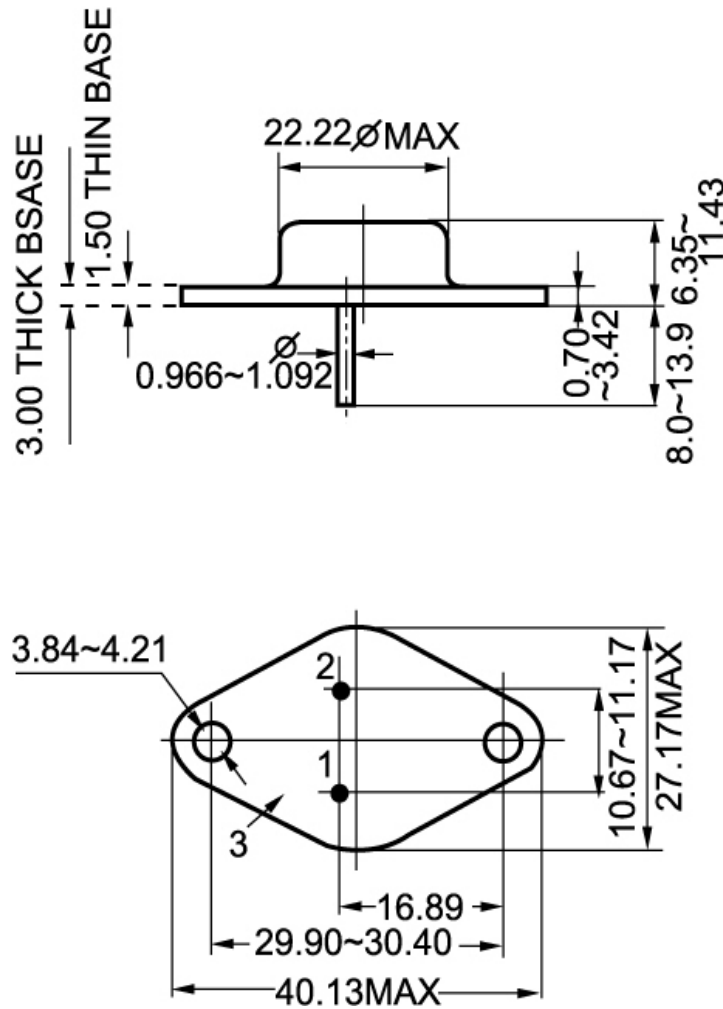


Fig.2 outline dimensions (unindicated tolerance: $\pm 0.10\text{mm}$)