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



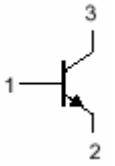


Fig.1 simplified outline (TO-3) and symbol

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
$R_{th\ j\text{-}c}$	Thermal resistance junction to case	1.17	℃/W

Silicon NPN Power Transistors 2N5498

CHARACTERISTICS

Tj=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{CEO(SUS)}$	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}=100Ohm	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℃			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

Silicon NPN Power Transistors 2N5498

PACKAGE OUTLINE

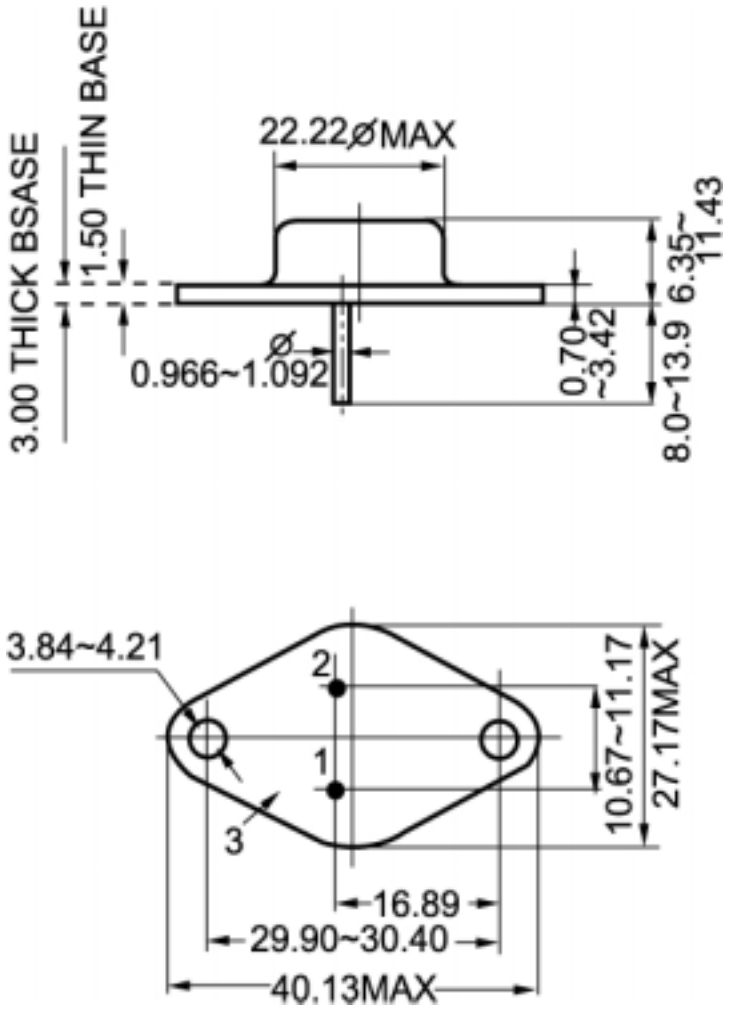


Fig.2 outline dimensions (unindicated tolerance:±0.10mm)