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.



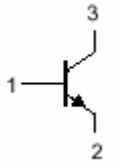


Fig.1 simplified outline (TO-3) and symbol

PINNING

PIN	DESCRIPTION
1	Base
2	Emitter
3	Collector

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

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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

PACKAGE OUTLINE

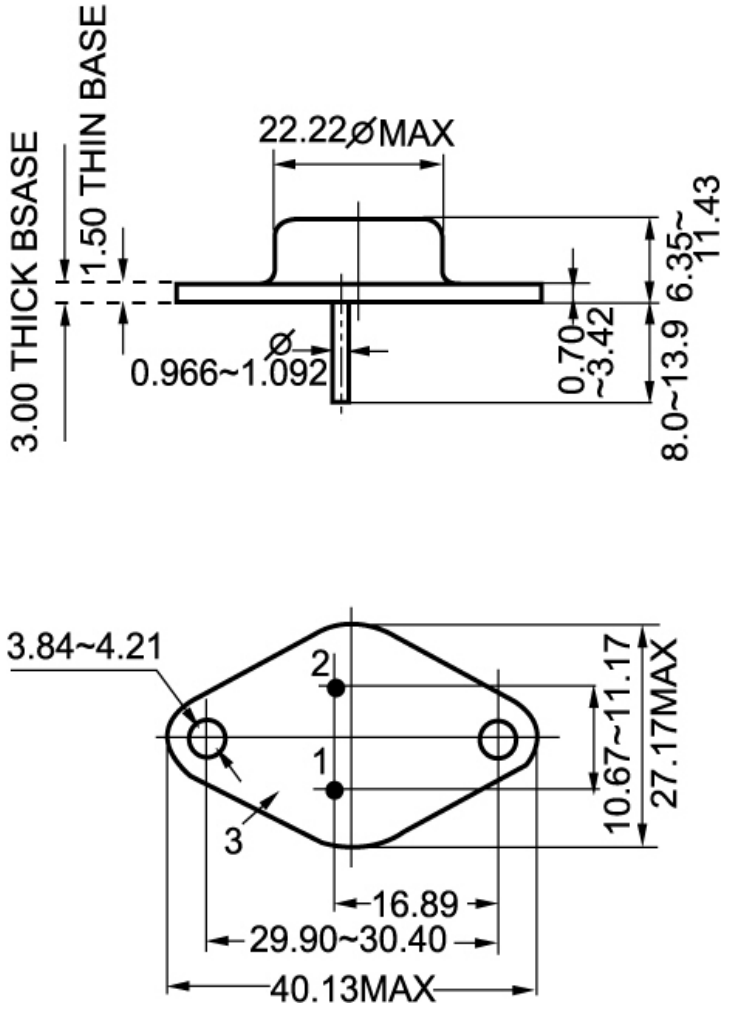


Fig.2 outline dimensions (unindicated tolerance:±0.10mm)