

Silicon PNP Power Transistors

2SA1044

DESCRIPTION

- With TO-3 package
- High transition frequency
- Excellent safe operating area

APPLICATIONS

- Power switching applications
- High frequency power amplifier
- Switching regulators
- DC-DC converters

PINNING(see Fig.2)

PIN	DESCRIPTION
1	Base
2	Emitter
3	Collector

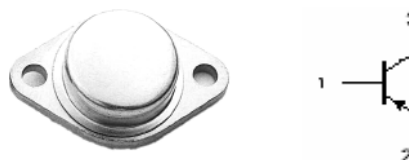


Fig.1 simplified outline (TO-3) and symbol

Absolute maximum ratings($T_a = \square$)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	Open emitter	-70	V
V_{CEO}	Collector-emitter voltage	Open base	-70	V
V_{EBO}	Emitter-base voltage	Open collector	-7	V
I_C	Collector current		-30	A
P_C	Collector power dissipation	$T_C = 25\square$	150	W
T_j	Junction temperature		175	$\square$
T_{stg}	Storage temperature		-55~200	$\square$

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CHARACTERISTICS

Tj=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)CEO}$	Collector-emitter breakdown voltage	$I_C=-10mA ; I_B=0$	-70			V
$V_{(BR)CBO}$	Collector-base breakdown voltage	$I_C=-0.1mA ; I_E=0$	-70			V
$V_{(BR)EBO}$	Emitter-base breakdown voltage	$I_E=-0.1mA ; I_C=0$	-7			V
V_{CEsat}	Collector-emitter saturation voltage	$I_C=-15A ; I_B=-1.5A$			-1.5	V
V_{BEsat}	Base-emitter saturation voltage	$I_C=-15A ; I_B=-1.5A$			-2.0	V
I_{CBO}	Collector cut-off current	$V_{CB}=-70V ; I_E=0$			-50	μA
I_{EBO}	Emitter cut-off current	$V_{EB}=-7V ; I_C=0$			-50	μA
h_{FE}	DC current gain	$I_C=-3A ; V_{CE}=-5V$	35		200	
C_{OB}	Output capacitance	$I_E=0 ; V_{CB}=-10V ; f=1.0MHz$		700		pF
f_T	Transition frequency	$I_C=-2A ; V_{CE}=-10V$		60		MHz

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PACKAGE OUTLINE

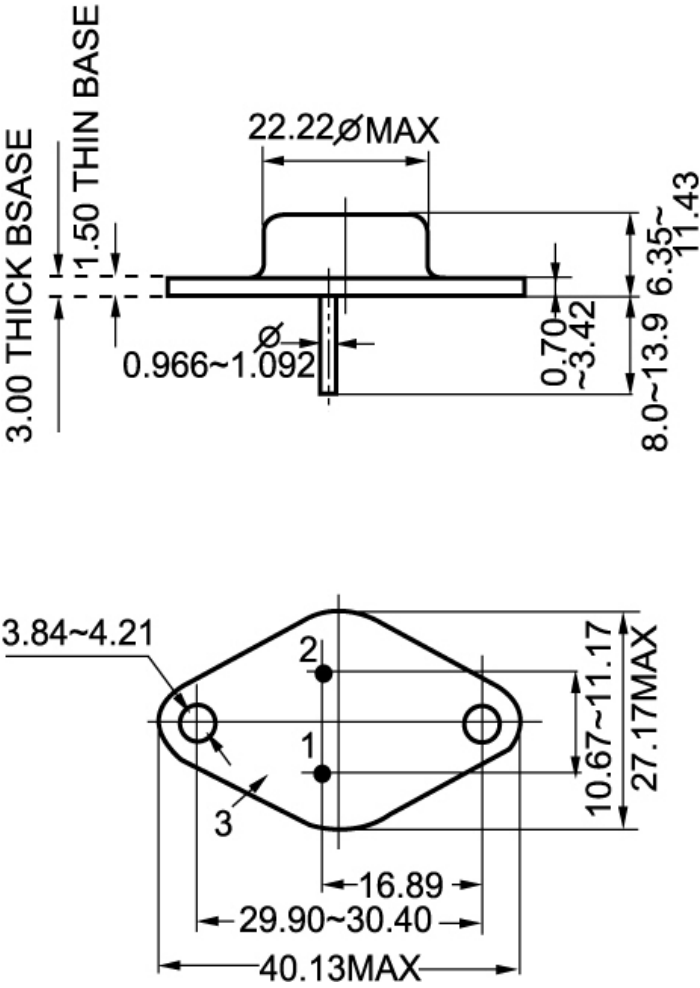


Fig.2 outline dimensions (unindicated tolerance:±0.1mm)