

Silicon PNP Power Transistors

2SB681

DESCRIPTION

- With TO-3 package
- High power dissipation

APPLICATIONS

- Power amplifier applications
- Recommended for high-power high-fidelity audio frequency amplifier output stage

PINNING(see Fig.2)

PIN	DESCRIPTION
1	Base
2	Emitter
3	Collector

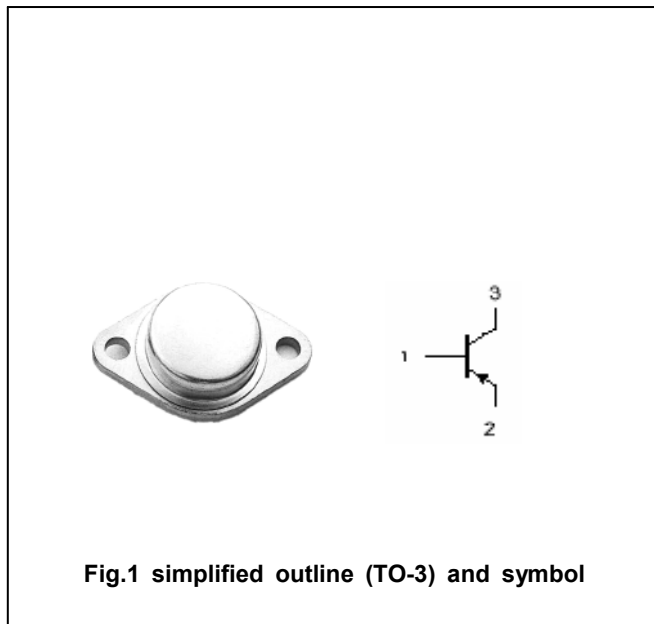


Fig.1 simplified outline (TO-3) and symbol

Absolute maximum ratings($T_a =$)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	Open emitter	-150	V
V_{CEO}	Collector-emitter voltage	Open base	-150	V
V_{EBO}	Emitter-base voltage	Open collector	-5	V
I_C	Collector current		-12	A
I_{CM}	Collector current-peak		-20	A
P_C	Collector power dissipation	$T_C = 25$	100	W
T_j	Junction temperature		150	
T_{stg}	Storage temperature		-40~150	

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CHARACTERISTICS

Tj=25 unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)CEO}$	Collector-emitter breakdown voltage	$I_C=-30mA ; I_B=0$	-150			V
$V_{(BR)CBO}$	Collector-emitter breakdown voltage	$I_C=-1mA ; I_E=0$	-150			V
$V_{(BR)EBO}$	Emitter-base breakdown voltage	$I_E=-1mA ; I_C=0$	-5			V
V_{CEsat}	Collector-emitter saturation voltage	$I_C=-6A ; I_B=-0.6A$			-2.5	V
V_{BE}	Base-emitter on voltage	$I_C=-1A ; V_{CE}=-5V$			-1.5	V
I_{CBO}	Collector cut-off current	$V_{CB}=-150V ; I_E=0$			-0.1	mA
I_{EBO}	Emitter cut-off current	$V_{EB}=-5V ; I_C=0$			-0.1	mA
h_{FE-1}	DC current gain	$I_C=-1A ; V_{CE}=-5V$	40		140	
h_{FE-2}	DC current gain	$I_C=-5A ; V_{CE}=-5V$	20			
f_T	Transition frequency	$I_C=-1A ; V_{CE}=-5V$		13		MHz

◆ h_{FE-1} Classifications

R	O
40-80	70-140

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PACKAGE OUTLINE

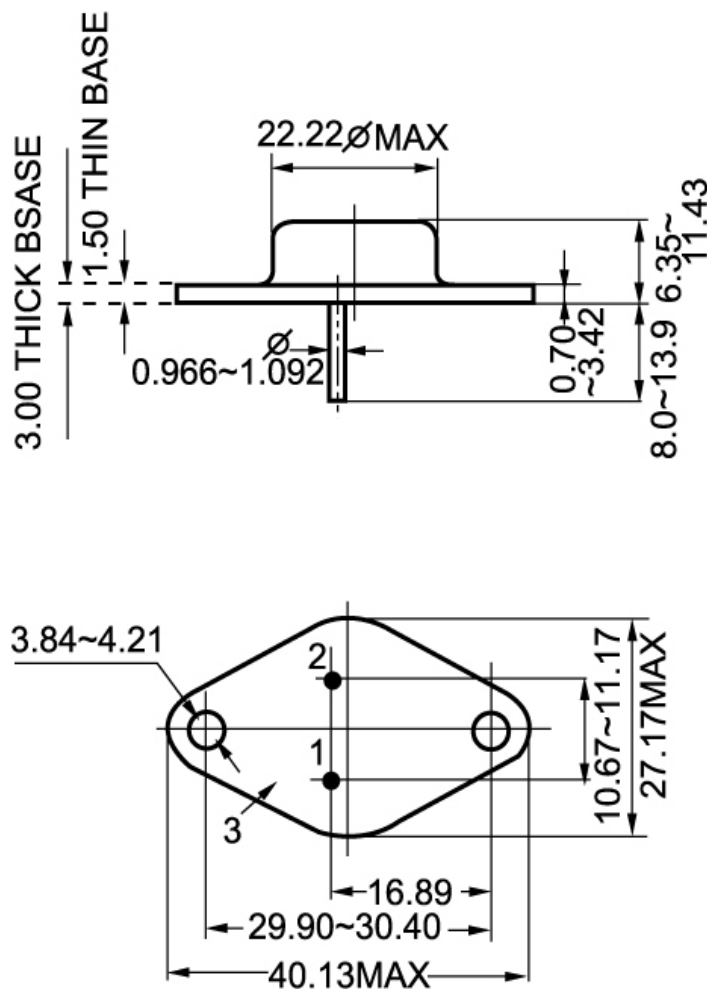


Fig.2 outline dimensions (unindicated tolerance:±0.1mm)