

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

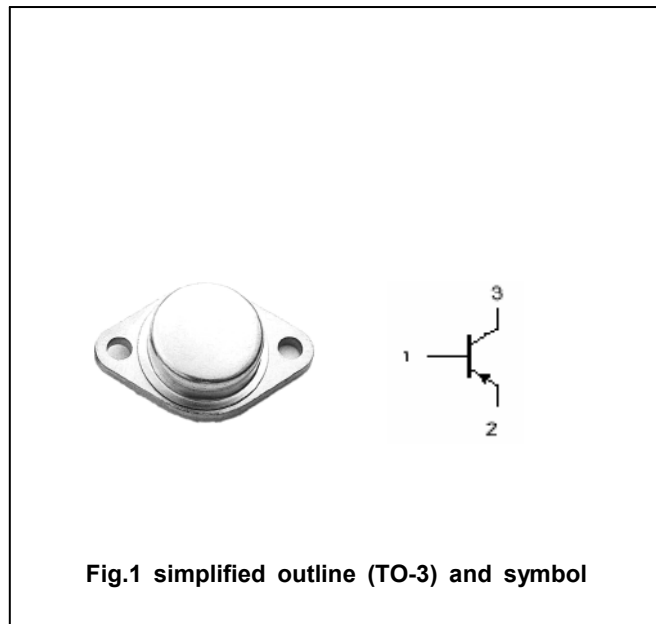


Fig.1 simplified outline (TO-3) and symbol

Absolute maximum ratings($T_a = \square$)

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	$T_C = 25 \square$	100	W
T_j	Junction temperature		150	\square
T_{stg}	Storage temperature		-40~150	\square

Silicon PNP Power Transistors

2SB681

CHARACTERISTICS

T_j=25°C 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

PACKAGE OUTLINE

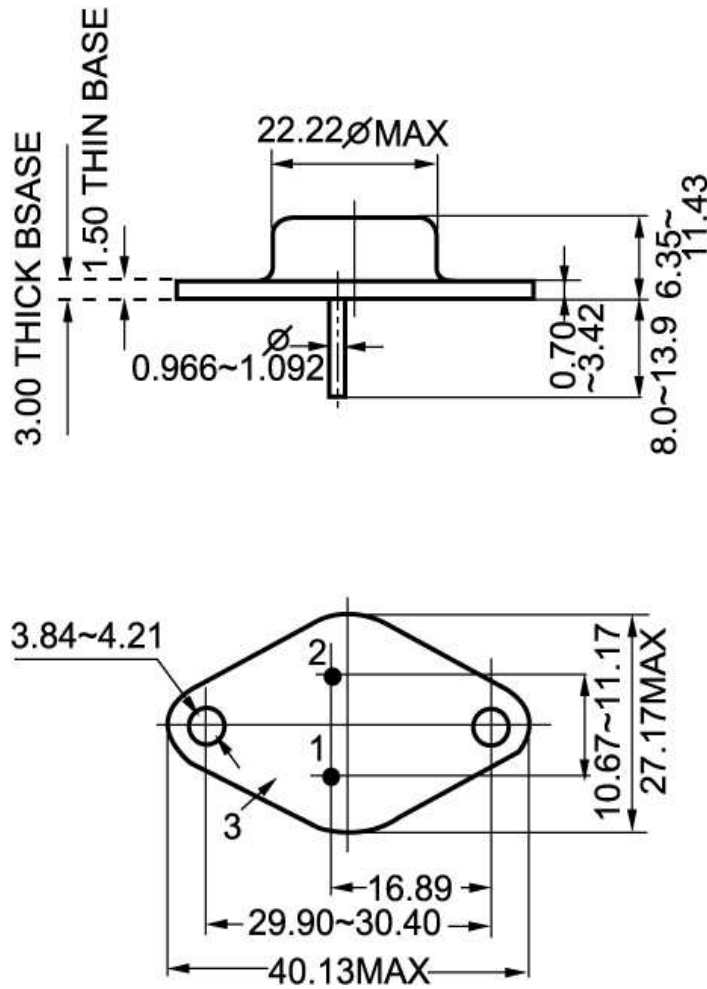


Fig.2 outline dimensions (unindicated tolerance:±0.1mm)