Silicon PNP Power Transistors 2SB531

DESCRIPTION

·With TO-3 package
·Complement to type 2SD371
·High power dissipation

APPLICATIONS

·Power amplifier applications
·Recommended for 30W 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(Ta=□)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	Open emitter	-100	V
V_{CEO}	Collector-emitter voltage	Open base	-100	V
V_{EBO}	Emitter-base voltage	Open collector	-5	V
I_C	Collector current		-6	A
I_E	Emitter current		6	A
P_C	Collector power dissipation	T_C=25□	50	W
T_j	Junction temperature		150	□
T_{stg}	Storage temperature		-65~150	□

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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=-100mA ;I_B=0	-100			V
$V_{(BR)EBO}$	Emitter-base breakdown voltage	I_E=-10mA ;I_C=0	-5			V
V_{CEsat}	Collector-emitter saturation voltage	I_C=-4A; I_B=-0.4A			-2.0	V
V_{BE}	Base-emitter on voltage	I_C=-4A ; V_{CE}=-5V			-1.5	V
I_{CBO}	Collector cut-off current	V_{CB}=-50V; 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		240	
h_{FE-2}	DC current gain	I_C=-4A ; V_{CE}=-5V	20			
C_{OB}	Output capacitance	I_E=0 ; V_{CB}=-10V;f=1.0MHz		180		pF
f_T	Transition frequency	I_C=-1A ; V_{CE}=-5V		8		MHz

◆ **h_{FE-1} Classifications**

R	O	Y
40-80	70-140	120-240

PACKAGE OUTLINE

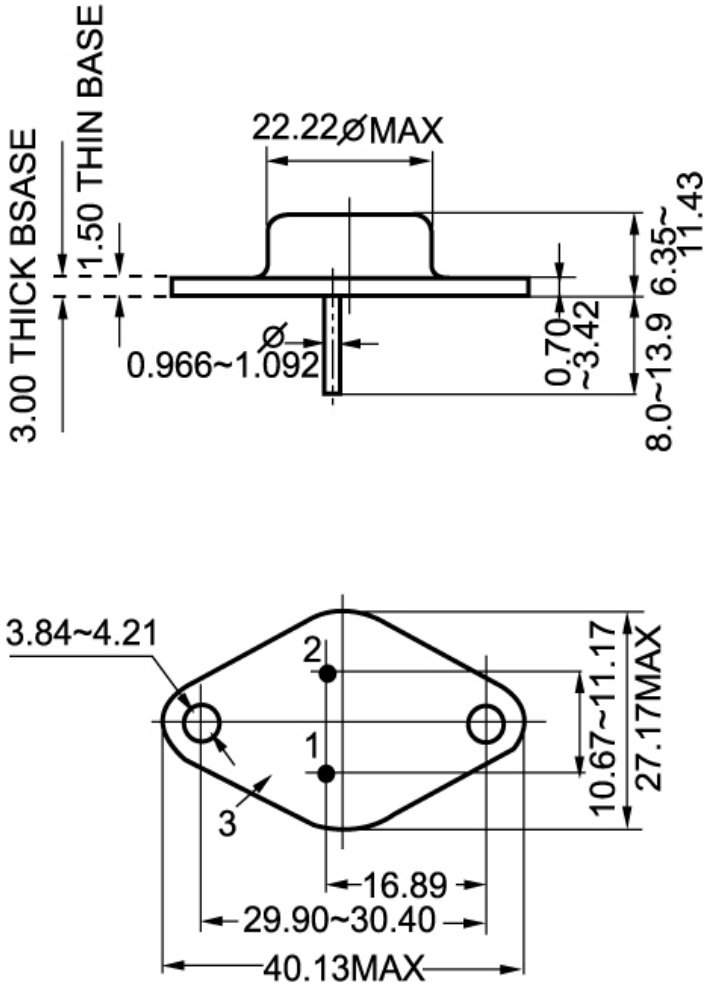


Fig.2 outline dimensions (unindicated tolerance:±0.1mm)