

Silicon NPN Power Transistors

2SD388

DESCRIPTION

- With TO-3 package
- High power dissipation

APPLICATIONS

- For use in power amplifier applications

PINNING

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	150	V
V_{CEO}	Collector-emitter voltage	Open base	140	V
V_{EBO}	Emitter-base voltage	Open collector	7	V
I_C	Collector current		8	A
P_C	Collector power dissipation	$T_C=25^\circ\text{C}$	80	W
T_j	Junction temperature		150	□
T_{stg}	Storage temperature		-55~150	□

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CHARACTERISTICS

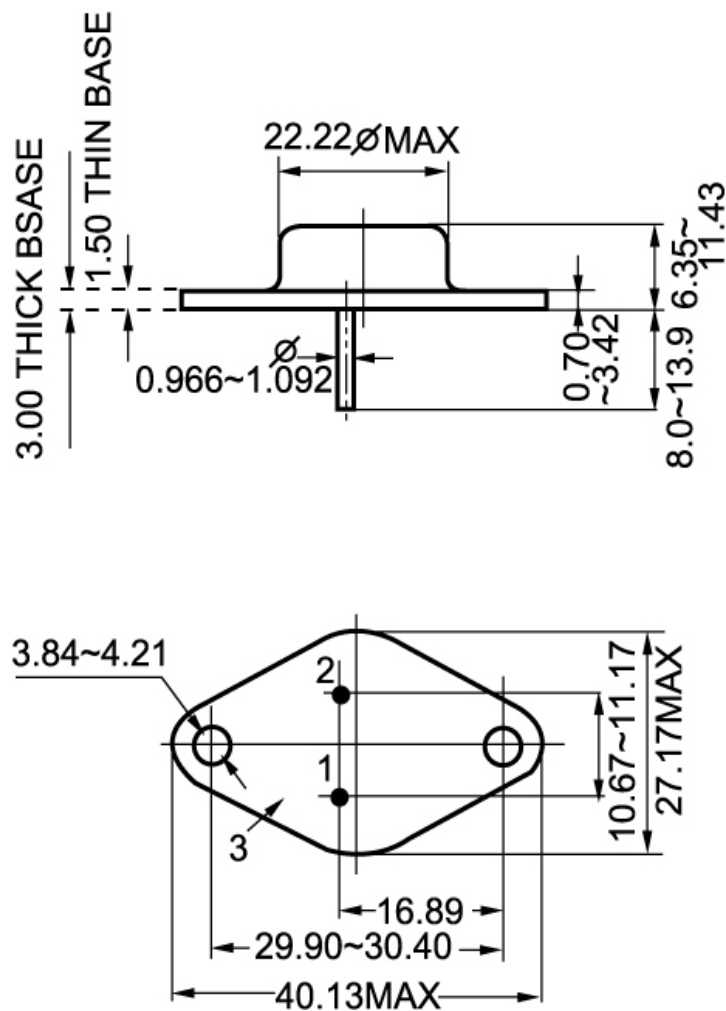
T_j=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{CEQ(SUS)}	Collector-emitter sustaining voltage	I _C =0.2A ; I _B =0	140			V
V _{(BR)EBO}	Emitter-base breakdown voltage	I _E =10mA ; I _C =0	7			V
V _{CEsat}	Collector-emitter saturation voltage	I _C =6A; I _B =0.6A			2.0	V
V _{BEsat}	Base-emitter saturation voltage	I _C =6A; I _B =0.6A			2.5	V
I _{CBO}	Collector cut-off current	V _{CB} =150V; I _E =0			0.1	mA
I _{EBO}	Emitter cut-off current	V _{EB} =7V; I _C =0			0.1	mA
h _{FE-1}	DC current gain	I _C =1A ; V _{CE} =5V	50			
h _{FE-2}	DC current gain	I _C =5A ; V _{CE} =5V	20			
f _T	Transition frequency	I _C =1A ; V _{CE} =10V		9		MHz

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PACKAGE OUTLINE

Fig.2 outline dimensions (unindicated tolerance: $\pm 0.1\text{mm}$)