

Silicon NPN Power Transistors

2SC1227

DESCRIPTION

- With TO-3 package
- High power dissipation

APPLICATIONS

- Suitable for use in clocked
voltage converters

PINNING (See Fig.2)

PIN	DESCRIPTION
1	Base
2	Emitter
3	Collector

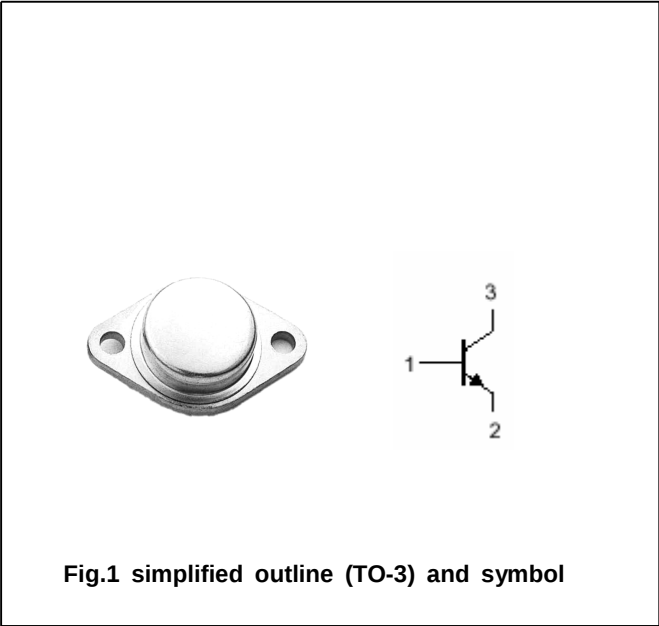


Fig.1 simplified outline (TO-3) and symbol

MAXIMUM RATINGS

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	Open emitter	300	V
V_{CEO}	Collector-emitter voltage	Open base	200	V
V_{EBO}	Emitter-base voltage	Open collector	7	V
I_C	Collector current		10	A
I_B	Base current		3	A
P_T	Total power dissipation	$T_C=25^\circ$	100	W
T_j	Junction temperature		150	°
T_{stg}	Storage temperature		-55~150	°

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	VALUE	UNIT
$R_{th\ j-c}$	Thermal resistance from junction to case	1.25	°/W

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CHARACTERISTICS

T_j=25° unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{(BR)CEO}	Collector-emitter breakdown voltage	I _C =50mA ; I _B =0	200			V
V _{(BR)CBO}	Collector-base breakdown voltage	I _C =0.1mA ; I _E =0	300			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 =5A; I _B =0.5A			1.0	V
V _{BEsat}	Base-emitter saturation voltage	I _C =5A; I _B =0.5A			1.5	V
I _{CBO}	Collector cut-off current	V _{CB} =300V; I _E =0			20	μA
I _{EBO}	Emitter cut-off current	V _{EB} =7V; I _C =0			20	μA
h _{FE}	DC current gain	I _C =5A ; V _{CE} =5V	50			

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PACKAGE OUTLINE

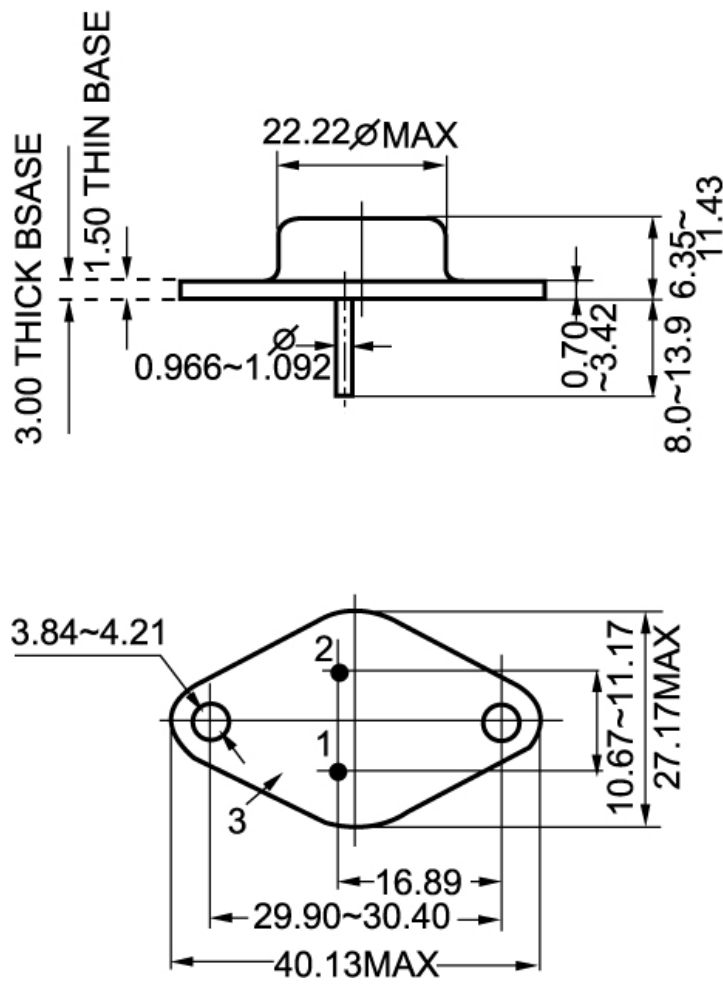


Fig.2 Outline dimensions