Silicon NPN Power Transistors 2SC1227

DESCRIPTION

- With TO-3 package
- High power dissipation

APPLICATIONS

- Suitable for use in clocked voltatge converters

PINNING (See Fig.2)

PIN	DESCRIPTION
1	Base
2	Emitter
3	Collector

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

MAXIMUN 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℃	100	W
T_j	Junction temperature		150	℃
T_{stg}	Storage temperature		-55~150	℃

THERMAL CHARACTERISTICS

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

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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=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

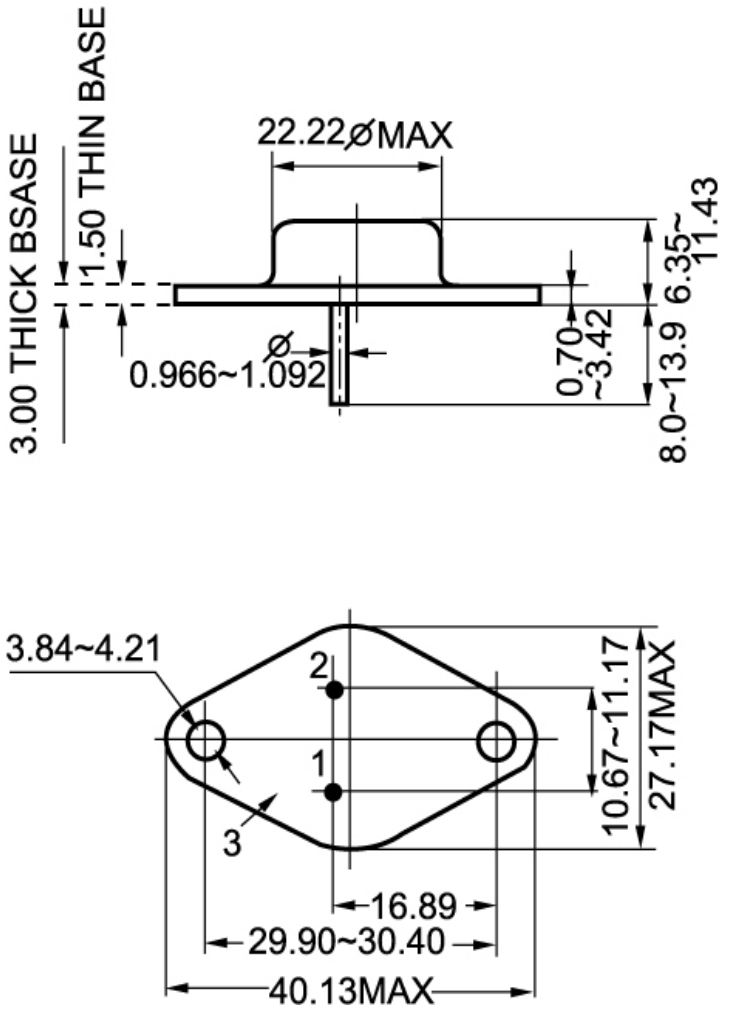

Fig.2 Outline dimensions