Silicon NPN Power Transistors 2SC2437

DESCRIPTION

- With TO-3 package
- High voltage,high speed switching
- High reliability

APPLICATIONS

- Switching regulators
- DC-DC convertor
- Solid state relay
- General purpose power amplifiers

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	450	V
V_{CEO}	Collector-emitter voltage	Open base	400	V
V_{EBO}	Emitter-base voltage	Open collector	7	V
I_C	Collector current		7	A
I_B	Base current		2	A
P_C	Collector power dissipation	T_C=25℃	100	W
T_j	Junction temperature		150	℃
T_{stg}	Storage temperature		-55~150	℃

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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=10mA ;I_B=0	400			V
$V_{(BR)CBO}$	Collector-base breakdown voltage	I_C=1mA ;I_E=0	450			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=7A; I_B=1.4A			1.5	V
V_{BEsat}	Base-emitter saturation voltage	I_C=7A; I_B=1.4A			1.2	V
I_{CBO}	Collector cut-off current	V_{CB}=450V; I_E=0			1.0	mA
I_{EBO}	Emitter cut-off current	V_{EB}=7V; I_C=0			0.1	mA
h_{FE}	DC current gain	I_C=3A ; V_{CE}=4V	10			
Switching times						
t_{on}	Turn-on time	I_C=7A; I_{B1}=-I_{B2}=1.4A R_L=30Ω;P_W=20μs;Duty≤2%			1.5	μs
t_{stg}	Storage time				3.0	μs
t_f	Fall time				1.5	μs

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PACKAGE OUTLINE

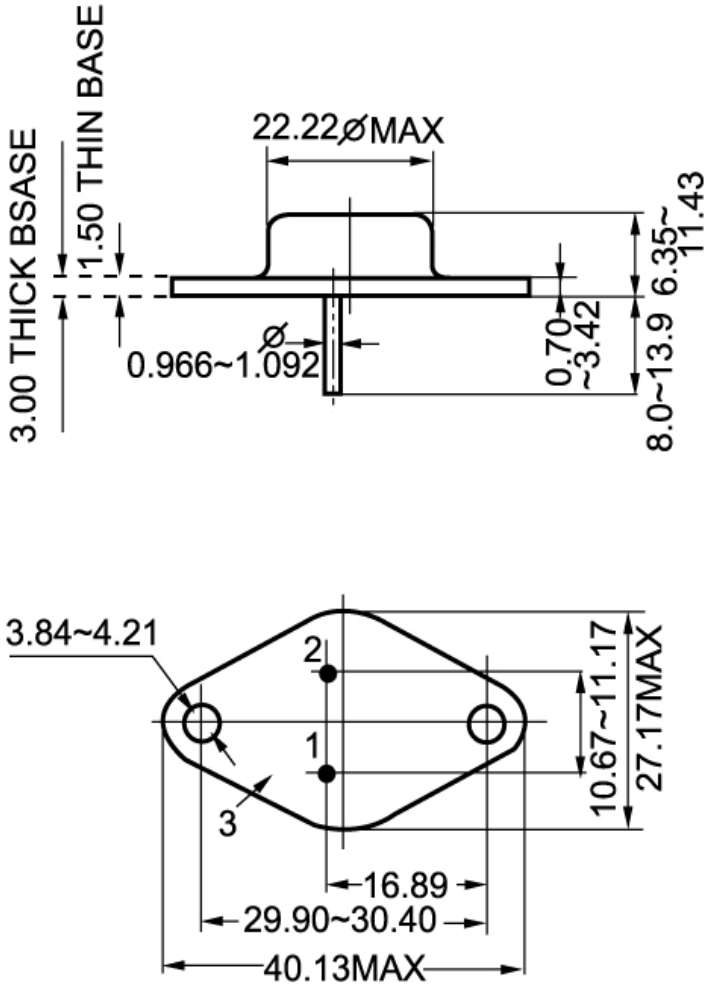

Fig.2 outline dimensions (unindicated tolerance:±0.1mm)