

Silicon NPN Power Transistors

2SD437

DESCRIPTION

- With TO-3 package
- High voltage
- Fast switching speed

APPLICATIONS

- For switching regulator and power amplifier applications

PINNING(see fig.2)

PIN	DESCRIPTION
1	Base
2	Emitter
3	Collector



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

ABSOLUTE MAXIMUM RATINGS($T_a=25^\circ\text{C}$)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	Open emitter	600	V
V_{CEO}	Collector-emitter voltage	Open base	350	V
V_{EBO}	Emitter-base voltage	Open collector	6	V
I_C	Collector current		10	A
I_{CM}	Collector current-peak		15	A
P_T	Total power dissipation	$T_C=25^\circ\text{C}$	80	W
T_j	Junction temperature		150	$^\circ\text{C}$
T_{stg}	Storage temperature		-65~150	$^\circ\text{C}$

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CHARACTERISTICS

Tj=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{CEQ(SUS)}$	Collector-emitter sustaining voltage	$I_C=0.1A; I_B=0$	350			V
$V_{(BR)EBO}$	Emitter-base breakdown voltage	$I_E=10mA; I_C=0$	6			V
$V_{CEsat-1}$	Collector-emitter saturation voltage	$I_C=5A; I_B=1A$			1.5	V
$V_{CEsat-2}$	Collector-emitter saturation voltage	$I_C=8A; I_B=2.5A$			3.0	V
$V_{BEsat-1}$	Base-emitter saturation voltage	$I_C=5A; I_B=1A$			1.4	V
$V_{BEsat-2}$	Base-emitter saturation voltage	$I_C=8A; I_B=2.5A$			1.8	V
I_{CBO}	Collector cut-off current	$V_{CB}=600V; I_E=0$			0.1	mA
I_{EBO}	Emitter cut-off current	$V_{EB}=6V; I_C=0$			0.1	mA
h_{FE-1}	DC current gain	$I_C=1A; V_{CE}=5V$	15		50	
h_{FE-2}	DC current gain	$I_C=6A; V_{CE}=5V$	10			

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PACKAGE OUTLINE

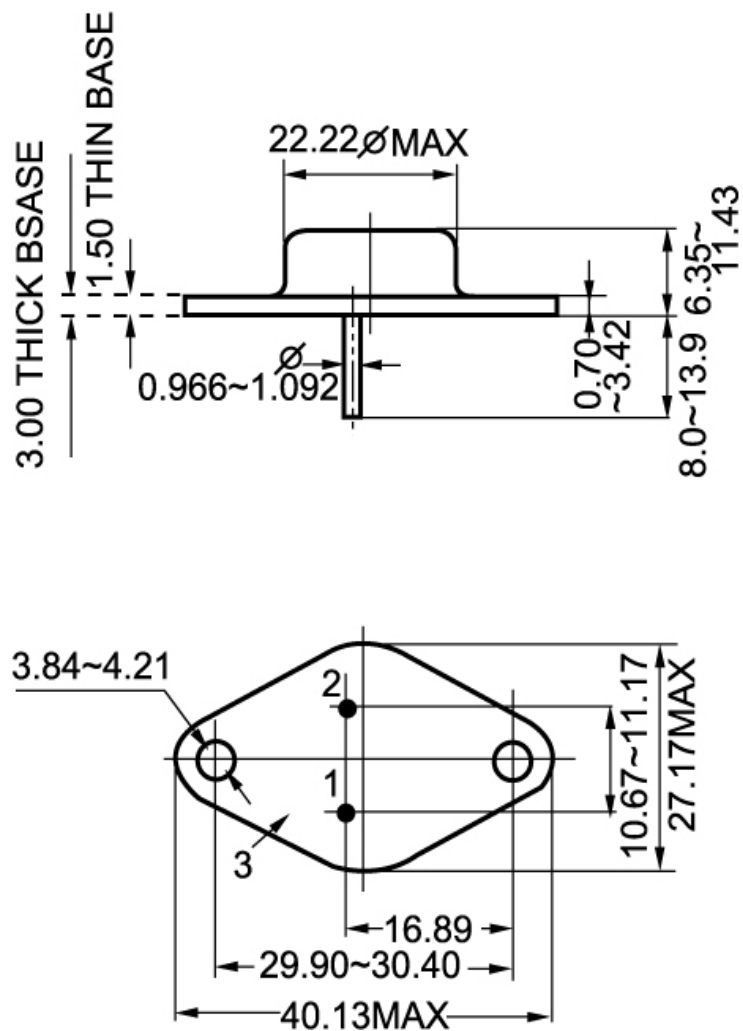


Fig.2 Outline dimensions