

**Inchange Semiconductor**

**Product Specification**

**Silicon NPN Power Transistors**

**2SD437**

**DESCRIPTION**

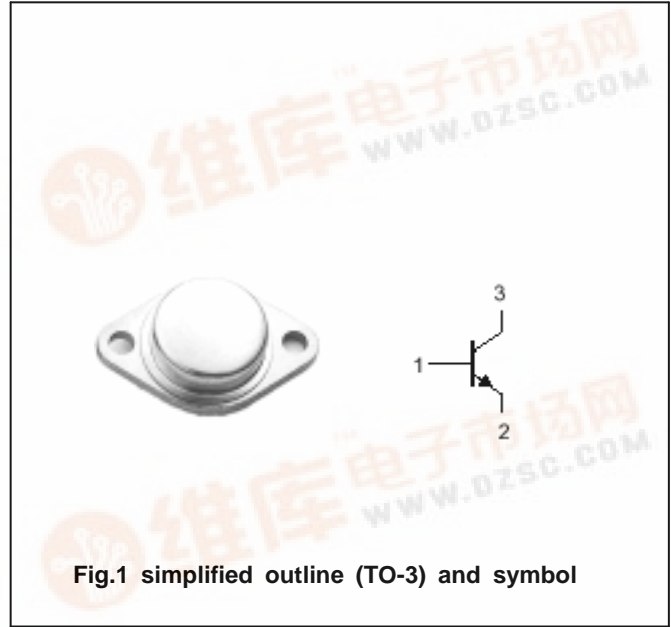
- With TO-3 package
- High voltage
- Fast switching speed

**APPLICATIONS**

- For switching regulator and power amplifier applications

**PINNING(see fig.2)**

PIN	DESCRIPTION
1	Base
2	Emitter
3	Collector



**ABSOLUTE MAXIMUM RATINGS(Ta=25 )**

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V <sub>CBO</sub>	Collector-base voltage	Open emitter	600	V
V <sub>CEO</sub>	Collector-emitter voltage	Open base	350	V
V <sub>EBO</sub>	Emitter-base voltage	Open collector	6	V
I <sub>C</sub>	Collector current		10	A
I <sub>CM</sub>	Collector current-peak		15	A
P <sub>T</sub>	Total power dissipation	T <sub>C</sub> =25	80	W
T <sub>j</sub>	Junction temperature		150	
T <sub>stg</sub>	Storage temperature		-65~150	

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## CHARACTERISTICS

T<sub>j</sub>=25 unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V <sub>CEO(SUS)</sub>	Collector-emitter sustaining voltage	I <sub>C</sub> =0.1A; I <sub>B</sub> =0	350			V
V <sub>(BR)EBO</sub>	Emitter-base breakdown voltage	I <sub>E</sub> =10mA; I <sub>C</sub> =0	6			V
V <sub>CEsat-1</sub>	Collector-emitter saturation voltage	I <sub>C</sub> =5 A; I <sub>B</sub> =1 A			1.5	V
V <sub>CEsat-2</sub>	Collector-emitter saturation voltage	I <sub>C</sub> =8 A; I <sub>B</sub> =2.5 A			3.0	V
V <sub>BEsat-1</sub>	Base-emitter saturation voltage	I <sub>C</sub> =5 A; I <sub>B</sub> =1 A			1.4	V
V <sub>BEsat-2</sub>	Base-emitter saturation voltage	I <sub>C</sub> =8 A; I <sub>B</sub> =2.5 A			1.8	V
I <sub>CBO</sub>	Collector cut-off current	V <sub>CB</sub> =600V; I <sub>E</sub> =0			0.1	mA
I <sub>EBO</sub>	Emitter cut-off current	V <sub>EB</sub> =6V; I <sub>C</sub> =0			0.1	mA
h <sub>FE-1</sub>	DC current gain	I <sub>C</sub> =1A ; V <sub>CE</sub> =5V	15		50	
h <sub>FE-2</sub>	DC current gain	I <sub>C</sub> =6A ; V <sub>CE</sub> =5V	10			

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PACKAGE OUTLINE

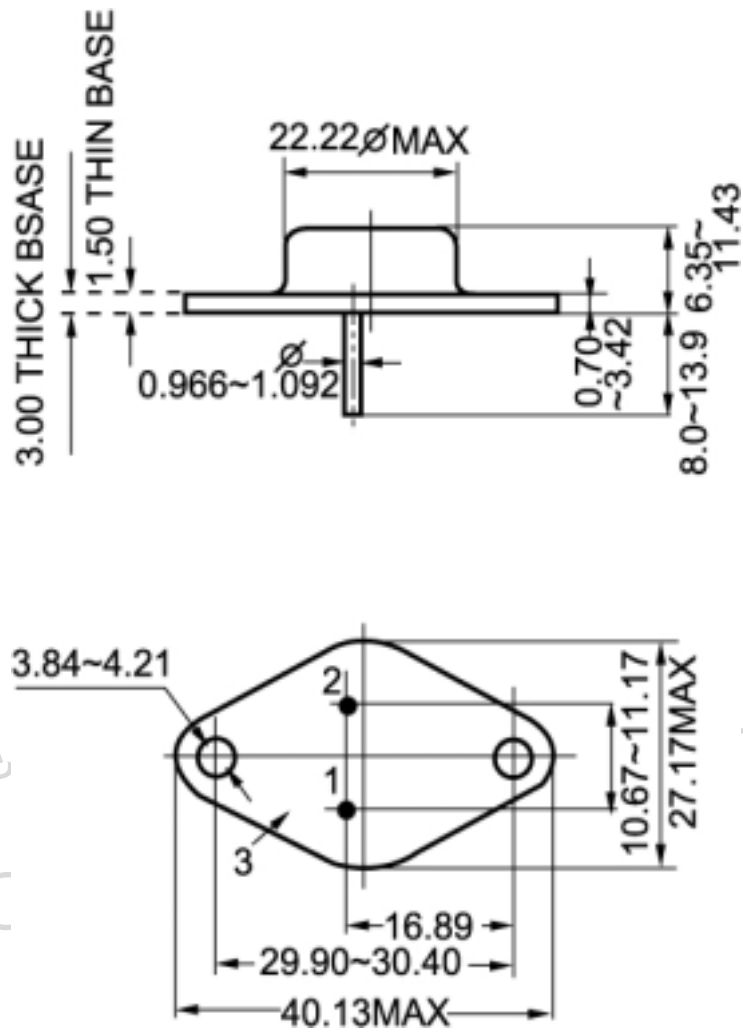


Fig.2 Outline dimensions