

Silicon NPN Power Transistors

2SC2429

DESCRIPTION

- With TO-3 package
- High voltage ,high speed
- Wide area of safe operation

APPLICATIONS

- High speed switching
- Converters and inverters

PINNING (See Fig.2)

PIN	DESCRIPTION
1	Base
2	Emitter
3	Collector

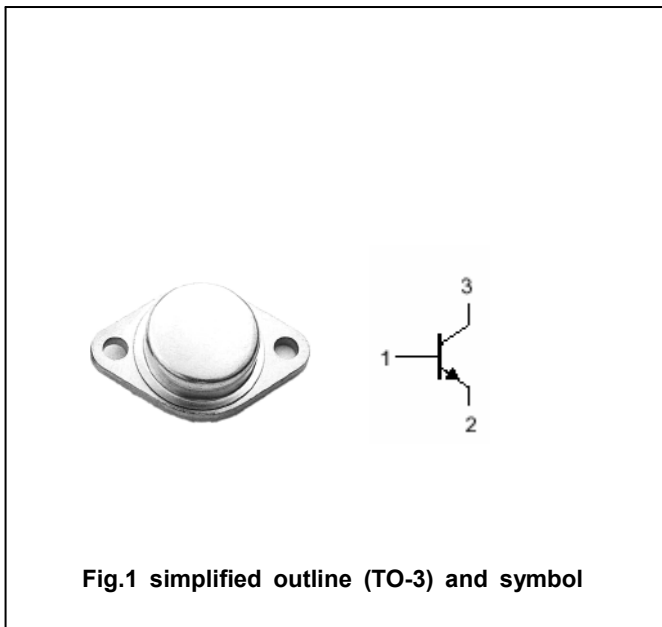


Fig.1 simplified outline (TO-3) and symbol

Absolute maximum ratings(Ta=□)

SYMBOL	PARAMETER	CONDITIONS	MAX	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		15	A
I _{CM}	Collector current-Peak		20	A
I _B	Base current		5	A
P _T	Total power dissipation	T _C =25□	150	W
T _j	Junction temperature		175	□
T _{stg}	Storage temperature		-65~175	□

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CHARACTERISTICS

T_j=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{CEO(SUS)}	Collector-emitter sustaining voltage	I _C =1A ; R _{BE} =∞	400			V
V _{(BR)EBO}	Emitter-base breakdown voltage	I _E =1mA ; I _C =0	7			V
V _{CEsat}	Collector-emitter saturation voltage	I _C =10A; I _B =2A		0.45	1.0	V
V _{BEsat}	Base-emitter saturation voltage	I _C =10A; I _B =2A		1.2	2.0	V
I _{CBO}	Collector cut-off current	V _{CB} =450V; I _E =0			0.1	mA
I _{EBO}	Emitter cut-off current	V _{EB} =6V; I _C =0			0.1	mA
h _{FE}	DC current gain	I _C =10A ; V _{CE} =5V	10	15	40	
f _T	Transition frequency	I _C =2A ; V _{CE} =10V,f=10MHz		35		MHz
C _{OB}	Collector output capacitance	I _E =0 ; V _{CB} =10V;f=1MHz		230		pF

Switching times

t _r	Rise time	V _{CC} =150V,I _C =10A I _{B1} =-I _{B2} =2A		0.15	0.5	μs
t _{stg}	Storage time			1.20	2.5	μs
t _f	Fall time			0.10	0.3	μs

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PACKAGE OUTLINE

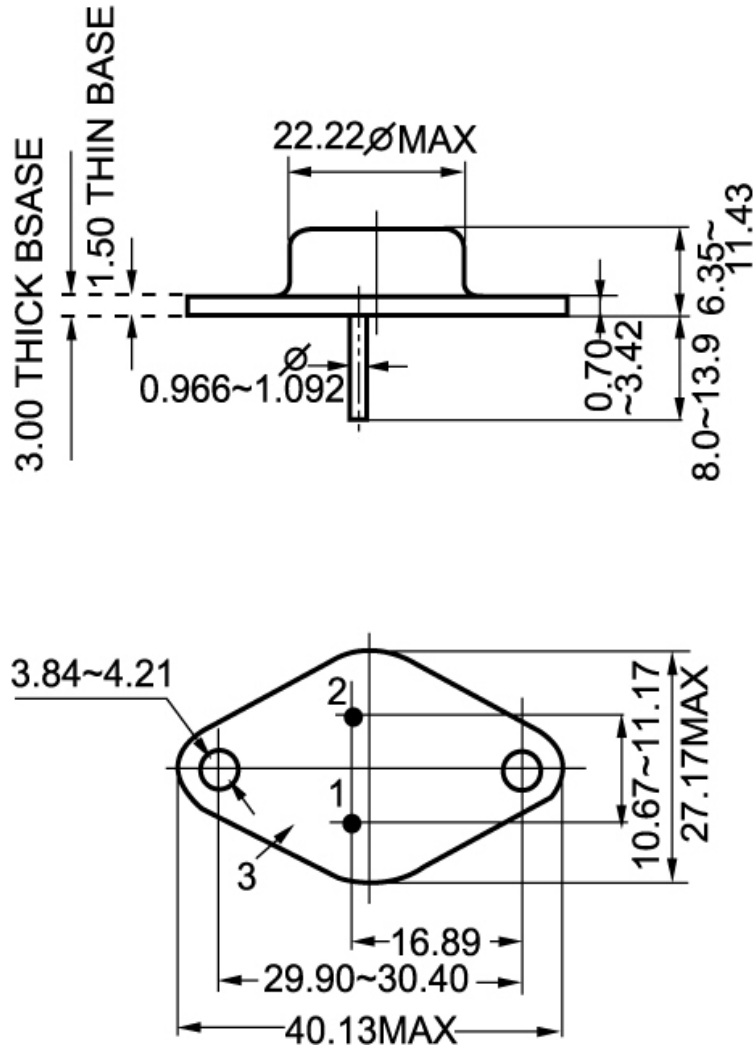


Fig.2 Outline dimensions