

Silicon NPN Power Transistors

BUX47A

DESCRIPTION

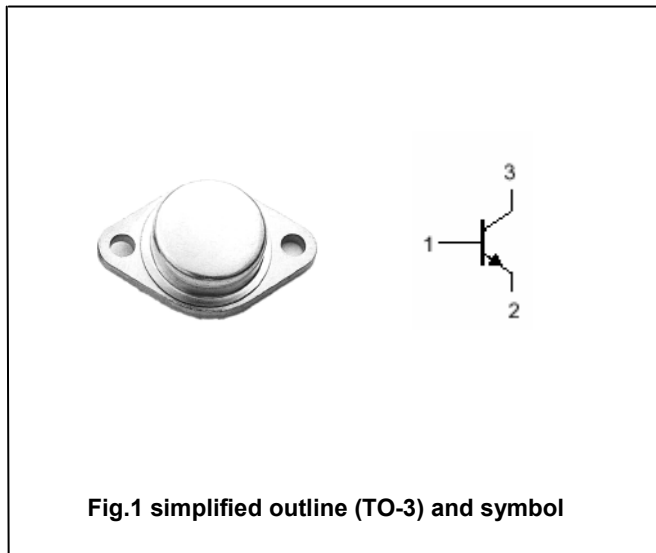
- With TO-3 package
- High voltage,high speed

APPLICATIONS

- Intended for high voltage,fast switching applications

PINNING(see fig.2)

PIN	DESCRIPTION
1	Base
2	Emitter
3	Collector



Absolute maximum ratings(Ta=□)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V _{CBO}	Collector-base voltage	Open emitter	1000	V
V _{CEO}	Collector-emitter voltage	Open base	450	V
V _{EBO}	Emitter-base voltage	Open collector	7	V
I _C	Collector current		9	A
I _{CM}	Collector current-peak		15	A
I _B	Base current		8	A
I _{BM}	Base current-peak		10	A
P _T	Total power dissipation	T _C =25□	125	W
T _j	Junction temperature		175	□
T _{stg}	Storage temperature		-65~175	□

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
R _{th j-c}	Thermal resistance junction to case	1.2	□/W

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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 =0.2A; I _B =0;	450			V
V _{(BR)EBO}	Emitter-base breakdown voltage	I _E =50mA; I _C =0;	7		30	V
V _{CEsat-1}	Collector-emitter saturation voltage	I _C =5A; I _B =1 A			1.5	V
V _{CEsat-2}	Collector-emitter saturation voltage	I _C =8A; I _B =2.5A			3	V
V _{BEsat}	Base-emitter saturation voltage	I _C =5A; I _B =1 A			1.6	V
I _{CEV}	Collector cut-off current	V _{CE} =850V; V _{BE} =-2.5V T _C =125 °C			0.15 1.5	mA
I _{EBO}	Emitter cut-off current	V _{EB} =5V; I _C =0			1	mA
h _{FE}	DC current gain	I _C =1A; V _{CE} =5V	15		50	

Switching times

T _{on}	Turn-on time	I _C =5A; I _{B1} =-I _{B2} =1A; V _{CC} =150V			0.7	μs
t _s	Storage time				3	μs
t _f	Fall time				0.8	μs

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PACKAGE OUTLINE

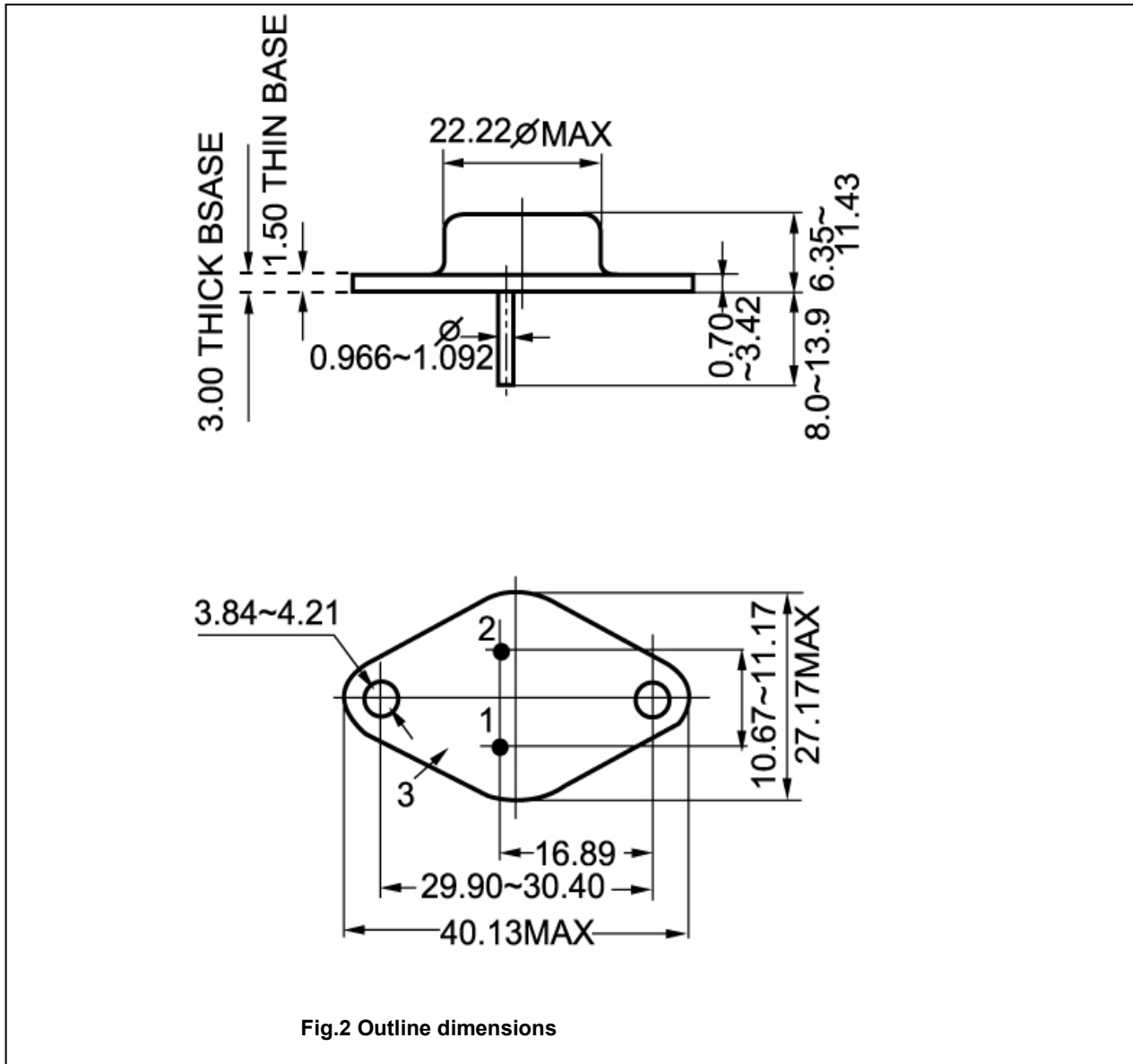


Fig.2 Outline dimensions