

Silicon NPN Power Transistors

BU100

DESCRIPTION

- With TO-3 package
- High voltage capability

APPLICATIONS

- For horizontal deflection output stage of CTV receivers and high voltage, fast switching and industrial applications

PINNING (See Fig.2)

PIN	DESCRIPTION
1	Base
2	Emitter
3	Collector

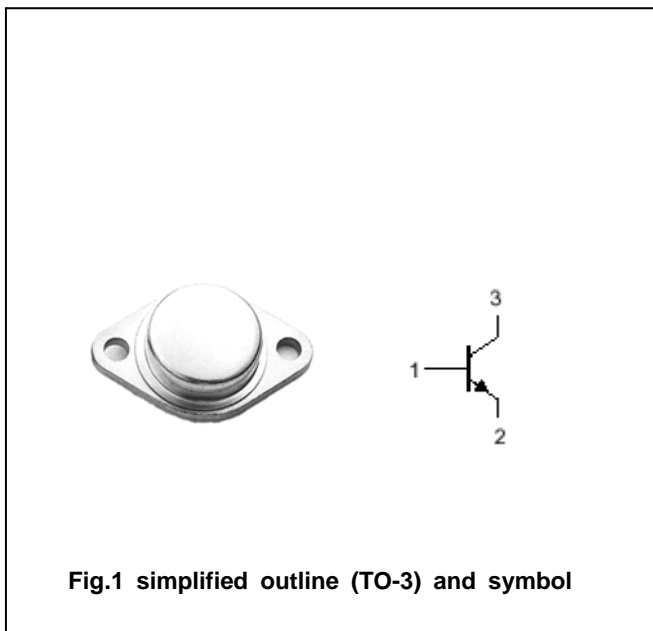


Fig.1 simplified outline (TO-3) and symbol

ABSOLUTE MAXIMUM RATINGS(T_C=25°C)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V _{CBO}	Collector-base voltage	Open emitter	150	V
V _{CEO}	Collector-emitter voltage	Open base	60	V
V _{EBO}	Emitter-base voltage	Open collector	7	V
I _C	Collector current		10	A
I _{CM}	Collector current-peak		15	A
P _D	Total power dissipation	T _C =75°C	15	W
T _j	Junction temperature		200	°C
T _{stg}	Storage temperature		-55~200	°C

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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 =100mA ; I _B =0	60			V
V _{(BR)CBO}	Collector-base breakdown voltage	I _C =1mA; I _E =0	150			V
V _{(BR)EBO}	Emitter-base breakdown voltage	I _E =1mA; I _C =0	7			V
V _{CE(sat)}	Collector-emitter saturation voltage	I _C =8A ; I _B =2.5A			3.3	V
V _{BE(sat)}	Base-emitter saturation voltage	I _C =8A ; I _B =2.5A			2.2	V
I _{CBO}	Collector cut-off current	V _{CB} =120V; I _E =0			10	μ A
I _{EBO}	Emitter cut-off current	V _{EB} =7V; I _C =0			10	μ A
h _{FE}	DC current gain	I _C =2A ; V _{CE} =2V	40		90	
f _T	Transition frequency	I _C =0.5A ; V _{CE} =10V;f=1MHz	0.1			MHz

PACKAGE OUTLINE

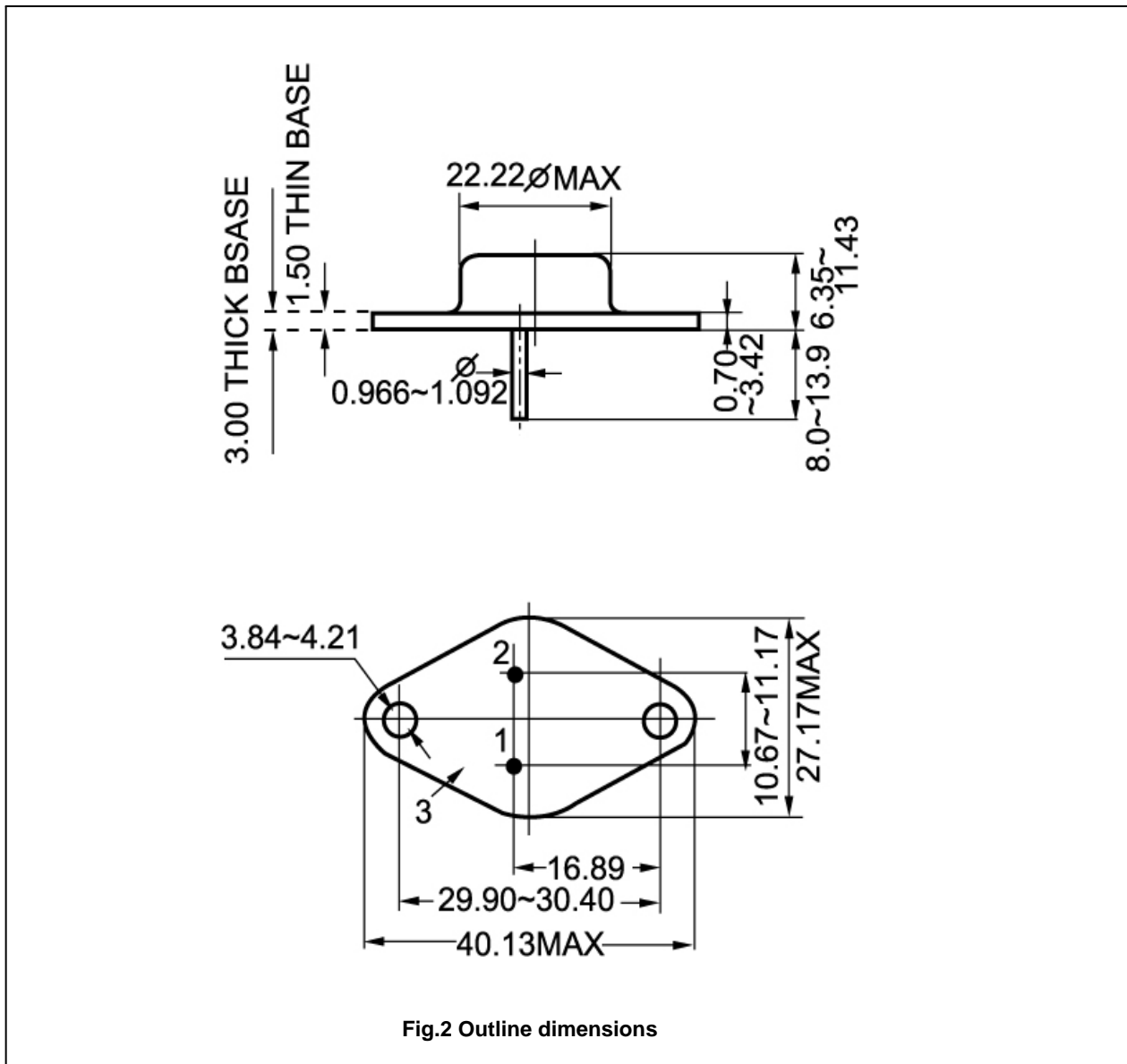


Fig.2 Outline dimensions