

Silicon NPN Power Transistors

BU208D

DESCRIPTION

- With TO-3 package
- Built-in damper diode
- High voltage capability

APPLICATIONS

- For use in horizontal deflection output stages for color TV receives.

PINNING(see fig.2)

PIN	DESCRIPTION
1	Base
2	Emitter
3	Collector

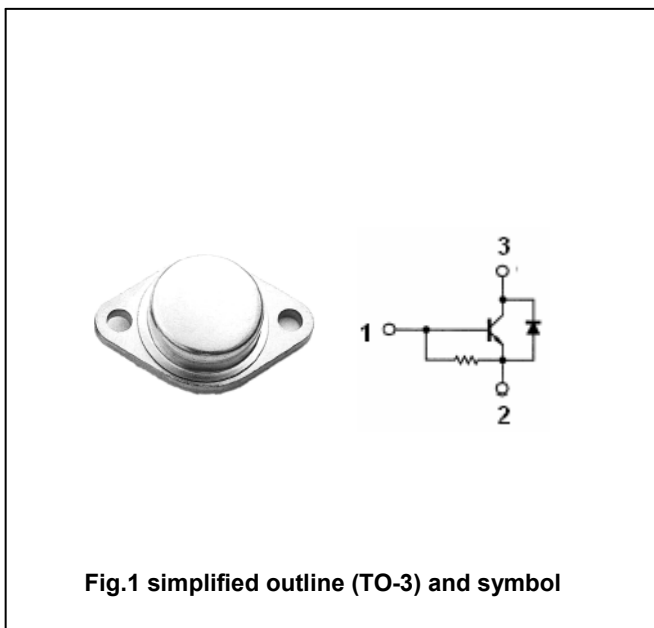


Fig.1 simplified outline (TO-3) and symbol

Absolute maximum ratings(Ta=□)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V _{CBO}	Collector-base voltage	Open emitter	1500	V
V _{CEO}	Collector-emitter voltage	Open base	700	V
V _{EBO}	Emitter-base voltage	Open collector	10	V
I _C	Collector current		8	A
I _{CM}	Collector current-peak		15	A
P _T	Total power dissipation	T _C =25□	150	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	1.0	K/W

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CHARACTERISTICS

T_j=25 °C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{CE0(SUS)}	Collector-emitter sustaining voltage	I _C =0.1A; I _B =0;	700			V
V _{CEsat}	Collector-emitter saturation voltage	I _C =4.5 A; I _B =2 A			1.0	V
V _{BEsat}	Base-emitter saturation voltage	I _C =4.5 A; I _B =2 A			1.3	V
I _{CES}	Collector cut-off current	V _{CE} =1500V; V _{BE} =0 T _j =125 °C			1.0 2.0	mA
I _{EBO}	Emitter cut-off current	V _{EB} =5V; I _C =0			300	mA
h _{FE}	DC current gain	I _C =1A ; V _{CE} =5V	8			
V _F	Diode forward voltage	I _F =4A			2.0	V
f _T	Transition frequency	I _C =0.1A ; V _{CE} =5V		7		MHz
t _s	Storage time	I _C =4.5A; I _B =1.8A; V _{CC} =140V L _C =0.9mH; L _B =3μH		7		μs
t _f	Fall time			0.55		μs

PACKAGE OUTLINE

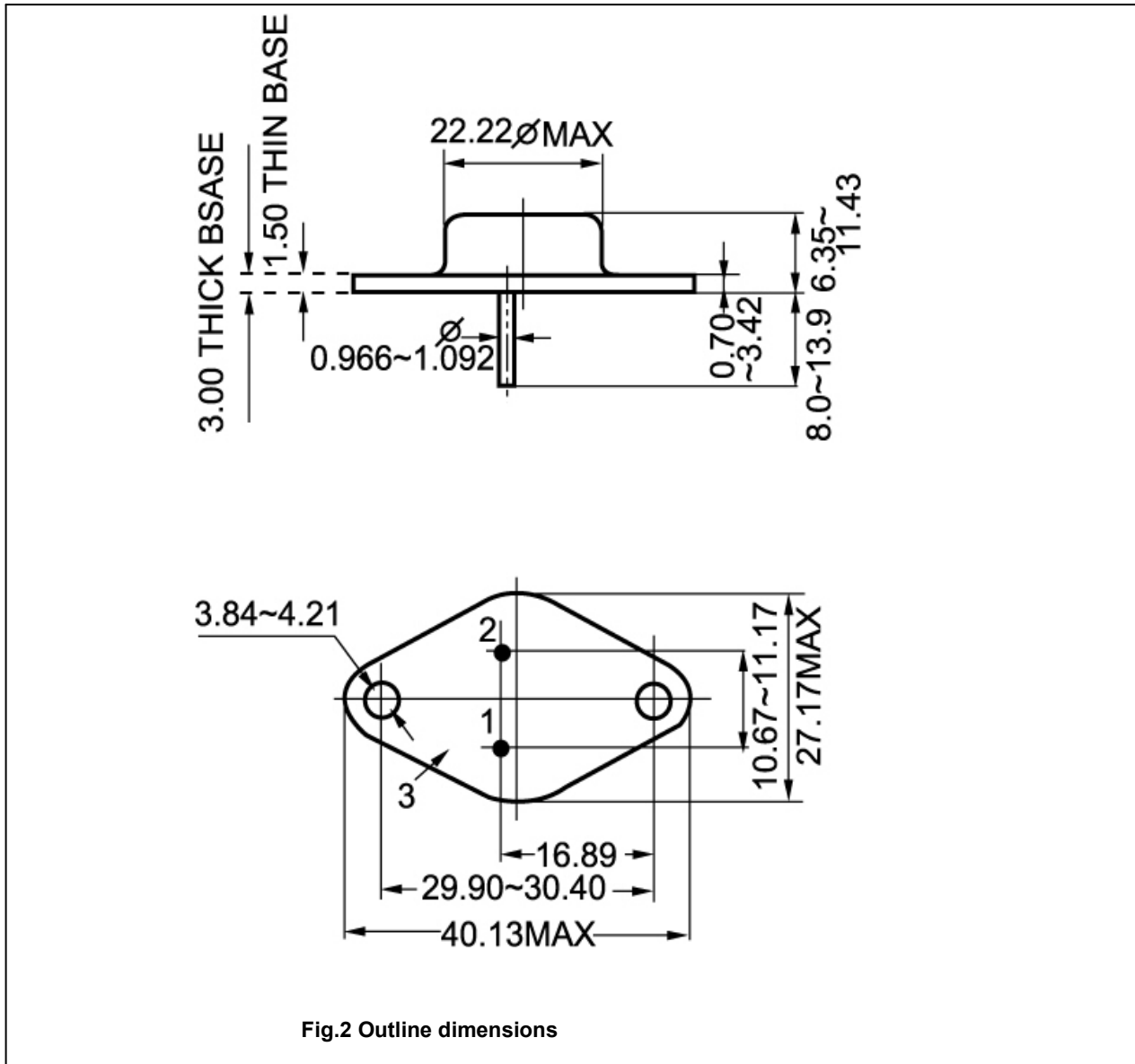


Fig.2 Outline dimensions