

Silicon NPN Power Transistors

BU1506DX

DESCRIPTION

- With TO-220F package
- High voltage
- High speed switching
- Built-in damper diode.

APPLICATIONS

- For use in horizontal deflection circuits of colour TV receivers.

PINNING

PIN	DESCRIPTION
1	Base
2	Collector
3	Emitter

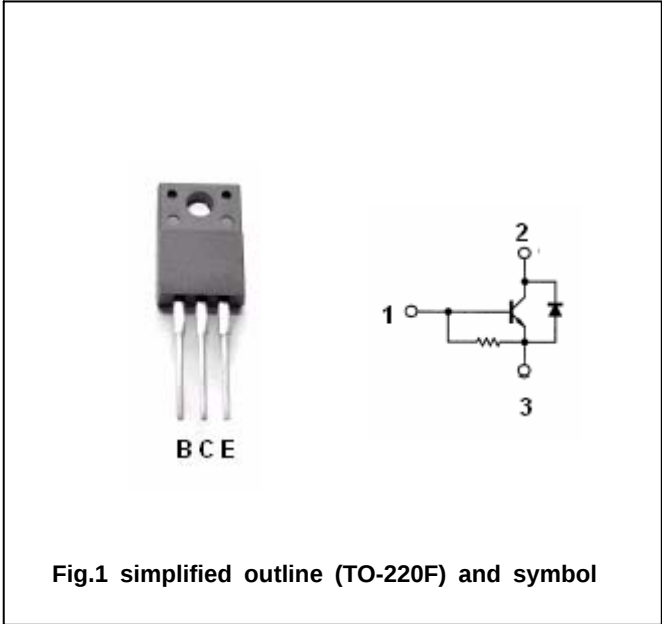


Fig.1 simplified outline (TO-220F) and symbol

Absolute maximum ratings (Ta=25)

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	7.5	V
I_C	Collector current		5	A
I_{CM}	Collector current-peak		8	A
I_B	Base current		3	A
I_{BM}	Base current-peak		8	A
P_C	Collector dissipation	$T_C=25$	32	W
T_j	Junction temperature		150	
T_{stg}	Storage temperature		-40~150	

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CHARACTERISTICS

T_j=25 unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{(BR)EBO}	Emitter-base breakdown voltage	I _E =600mA ; I _C =0	7.5	13.5		V
V _{CEQ(SUS)}	Collector-emitter sustaining voltage	I _C =100mA ; I _B =0; L=25mH	700			V
V _{CEsat}	Collector-emitter saturation voltage	I _C =3A; I _B =0.79A			5.0	V
V _{BEsat}	Base-emitter saturation voltage	I _C =3A; I _B =0.79A			1.1	V
I _{CES}	Collector cut-off current	V _{CE} =rated; V _{BE} =0 T _j =125			1.0 2.0	mA
I _{EBO}	Emitter cut-off current	V _{EB} =7.5V; I _C =0	90		180	mA
h _{FE-1}	DC current gain	I _C =0.3A ; V _{CE} =5V		12		
h _{FE-2}	DC current gain	I _C =3.0A ; V _{CE} =5V	3.8	5.5	7.5	
V _F	Diode forward voltage	I _F =3.0A		1.6	2.0	V
C _C	Collector output capacitance	I _E =0, f=1MHz; V _{CB} =10V		47		pF

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PACKAGE OUTLINE

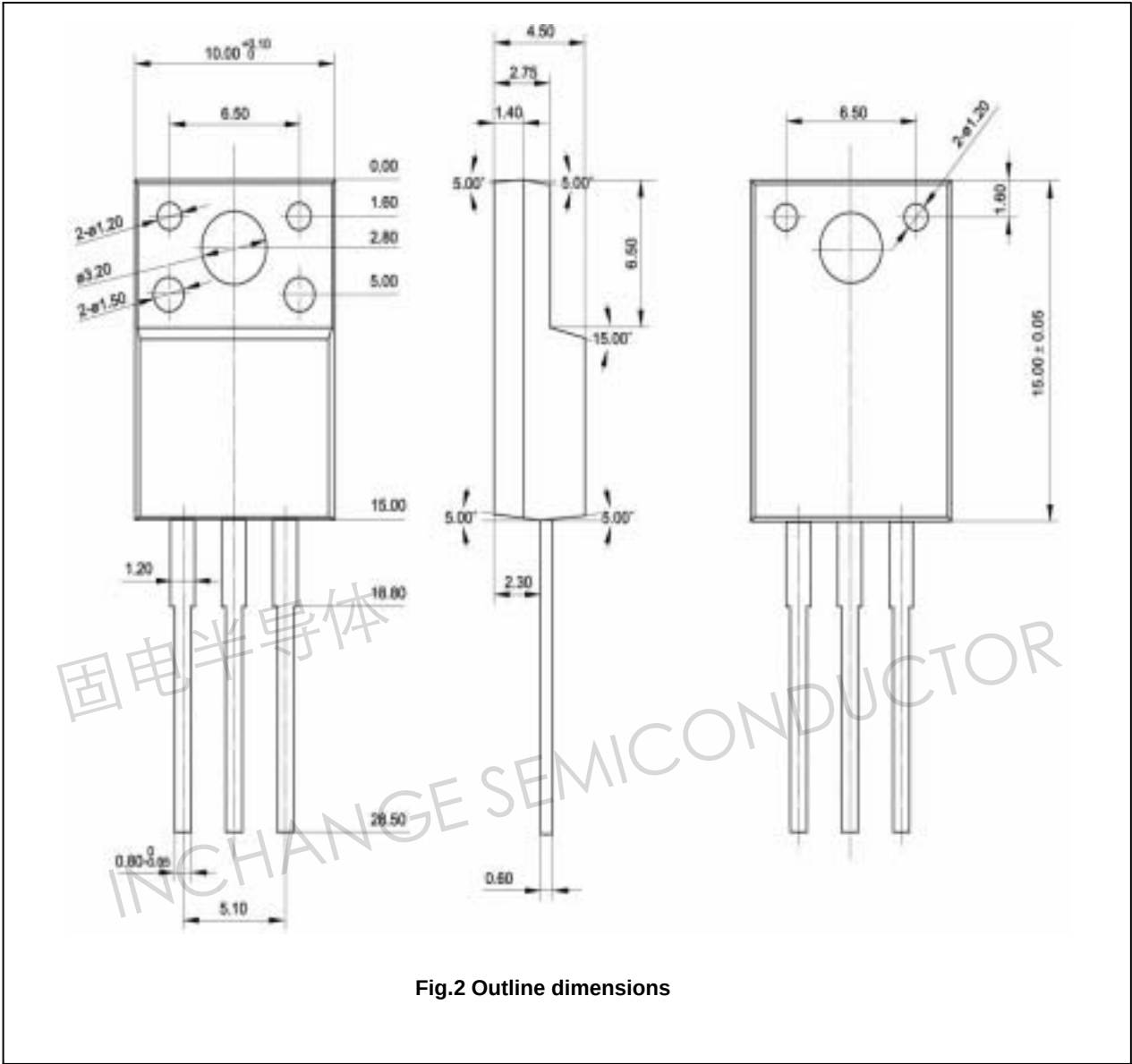


Fig.2 Outline dimensions