

Silicon NPN Power Transistors

BU2506DF

DESCRIPTION

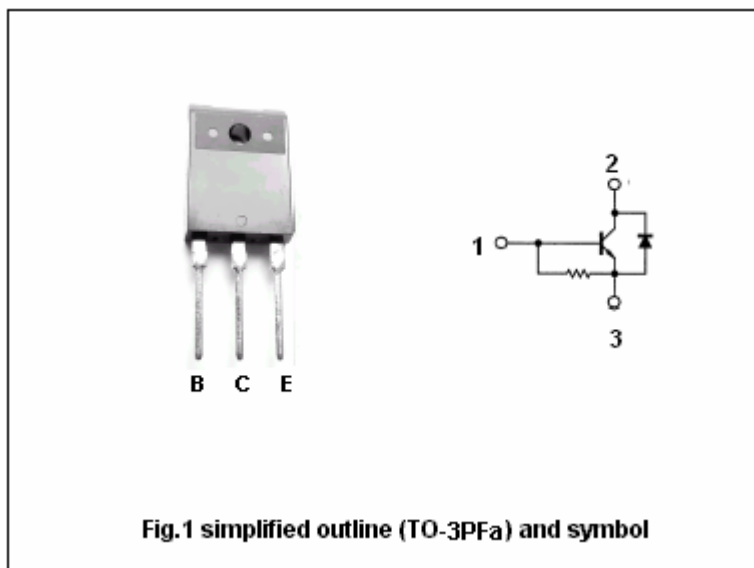
- With TO-3PFA package
- High voltage
- High speed switching
- Built-in damper diode

APPLICATIONS

- Intended for use in horizontal deflection circuits of colour TV receivers

PINNING

PIN	DESCRIPTION
1	Base
2	Collector
3	Emitter

Absolute maximum ratings($T_a=25^\circ\text{C}$)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	Open emitter	1500	V
V_{CEO}	Collector-emitter voltage	Open base	700	V
I_C	Collector current (DC)		5	A
I_{CM}	Collector current (Pulse)		8	A
I_B	Base Collector current (DC)		3	A
I_{BM}	Base current (Pulse)		5	A
P_{tot}	Total power dissipation	$T_C=25^\circ\text{C}$	45	W
T_j	Max.operating junction temperature		150	$^\circ\text{C}$
T_{stg}	Storage temperature		-65~150	$^\circ\text{C}$

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CHARACTERISTICS

T_j=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{CEQ(SUS)}	Collector-emitter sustaining voltage	I _C =100mA ; I _B =0,	700			V
V _{(BR)EBO}	Emitter-base breakdown voltage	I _E =600mA ; I _C =0	7.5	13.5		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} =RatedV _{CE} ; V _{BE} =0 T _j =125℃			1.0 2.0	mA
I _{EBO}	Emitter cut-off current	V _{EB} =7.5V ; I _C =0	95		208	mA
h _{FE-1}	DC current gain	I _C =0.3A ; V _{CE} =5V		12		
h _{FE-2}	DC current gain	I _C =3A ; 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

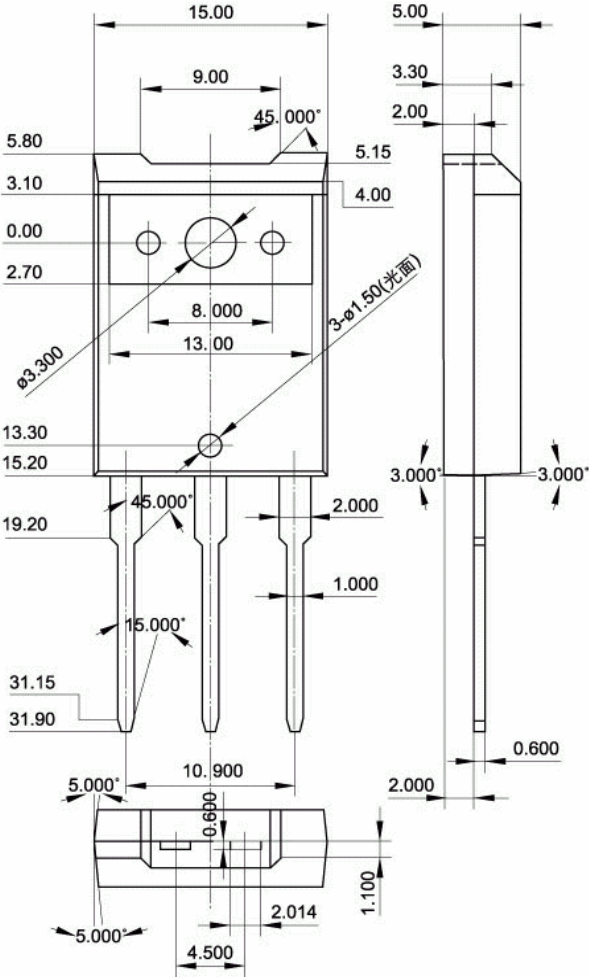


Fig.2 Outline dimensions (unindicated tolerance:±0.30mm)