

Silicon NPN Power Transistors

BU2520AF

DESCRIPTION

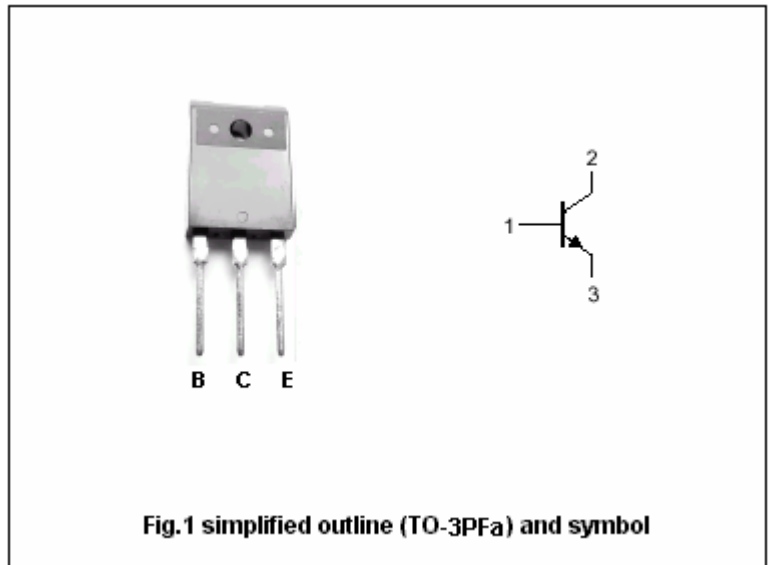
- With TO-3PFa package
- High voltage
- High speed switching

APPLICATIONS

- For use in horizontal deflection circuits of large screen 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	800	V
V_{EBO}	Emitter-base voltage	Open collector	7.5	V
I_C	Collector current (DC)		10	A
I_{CM}	Collector current (Pulse)		25	A
I_B	Base Collector current (DC)		6	A
I_{BM}	Base current (Pulse)		9	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

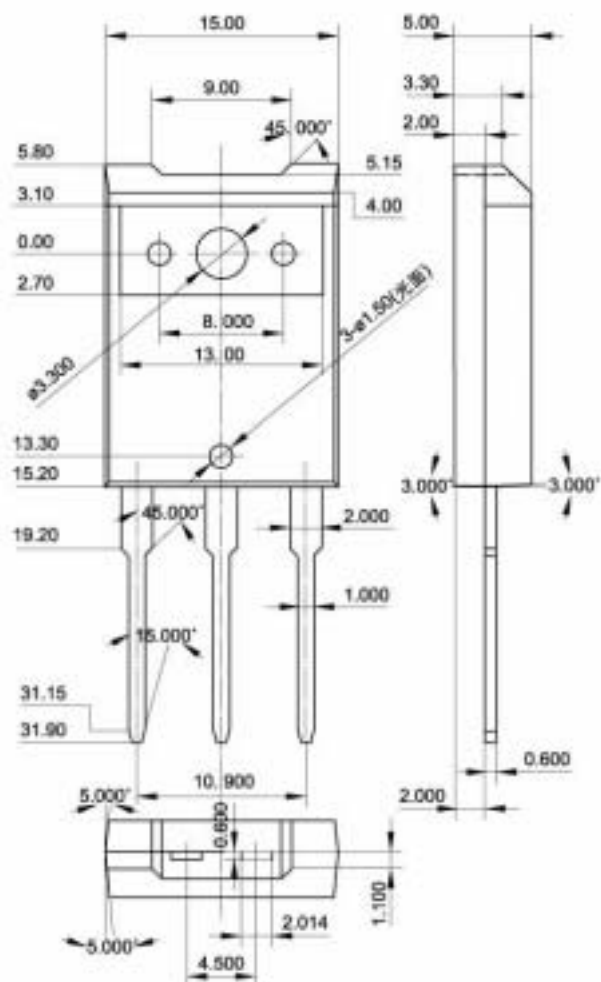
T_j=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{CEQ(SUS)}	Collector-emitter sustaining voltage	I _C =100mA ; I _B =0, L=25mH	800			V
V _{EBO}	Emitter-base breakdown voltage	I _B =1mA ; I _C =0	7.5	13.5		V
V _{CEsat}	Collector-emitter saturation voltage	I _C =6A ; I _B =1.2 A			5.0	V
V _{BEsat}	Base-emitter saturation voltage	I _C =6A ; I _B =1.2 A			1.1	V
I _{CES}	Collector cut-off current	V _{CE} =BV _{CES} ; V _{BE} =0 T _j =125°C			1.0 2.0	mA
I _{EBO}	Emitter cut-off current	V _{EB} =7.5V; I _C =0			1.0	mA
h _{FE-1}	DC current gain	I _C =0.1A ; V _{CE} =5V		13		
h _{FE-2}	DC current gain	I _C =6A ; V _{CE} =5V	5	7	9.5	
C _C	Collector capacitance	I _E =0; f=1MHz; V _{CB} =10V		115		pF

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PACKAGE OUTLINE

Fig.2 Outline dimensions (unindicated tolerance: $\pm 0.30\text{mm}$)