

Silicon NPN Power Transistors

BU2525AF

DESCRIPTION

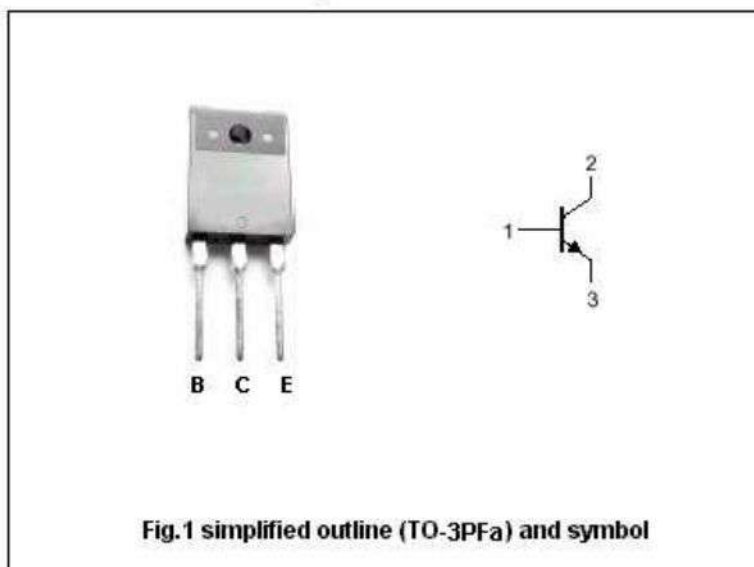
- With TO-3PFa package
- High voltage
- High speed switching

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
I_C	Collector current (DC)		12	A
I_{CM}	Collector current -peak		30	A
I_B	Base Collector current (DC)		8	A
I_{BM}	Base current -peak		12	A
P_{tot}	Total power dissipation	$T_C=25^\circ\text{C}$	45	W
T_j	Junction temperature		150	$^\circ\text{C}$
T_{stg}	Storage temperature		-65~150	$^\circ\text{C}$

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CHARACTERISTICS

 $T_j=25^\circ\text{C}$ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{CE(SUS)}$	Collector-emitter sustaining voltage	$I_C=100\text{mA}; I_B=0, L=25\text{mH}$	800			V
$V_{(BR)EBO}$	Emitter-base breakdown voltage	$I_E=1\text{mA}; I_C=0$	7.5	13.5		V
V_{CEsat}	Collector-emitter saturation voltage	$I_C=8\text{A}; I_B=1.6\text{A}$			5.0	V
V_{BEsat}	Base-emitter saturation voltage	$I_C=8\text{A}; I_B=1.6\text{A}$			1.1	V
I_{CES}	Collector cut-off current	$V_{CE}=BV_{CES}; V_{BE}=0$ $T_j=125^\circ\text{C}$			1.0 2.0	mA
I_{EBO}	Emitter cut-off current	$V_{EB}=7.5\text{V}; I_C=0$			1.0	mA
h_{FE-1}	DC current gain	$I_C=0.1\text{A}; V_{CE}=5\text{V}$		13		
h_{FE-2}	DC current gain	$I_C=8\text{A}; V_{CE}=5\text{V}$	5	7	9.5	
C_C	Collector capacitance	$I_E=0; f=1\text{MHz}; V_{CB}=10\text{V}$		145		pF

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PACKAGE OUTLINE

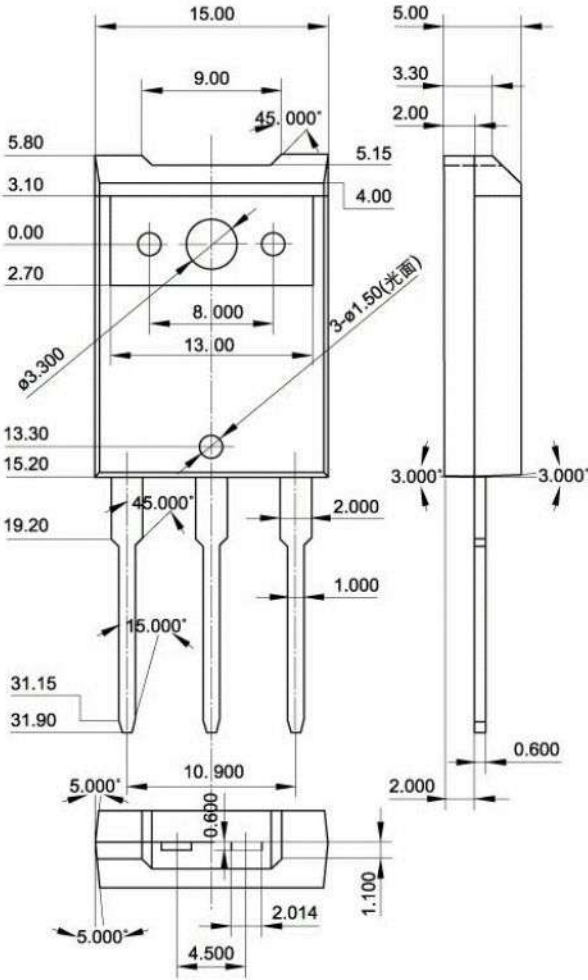


Fig.2 Outline dimensions (unindicated tolerance:±0.30mm)