

Silicon NPN Power Transistors

BU1508AF

DESCRIPTION

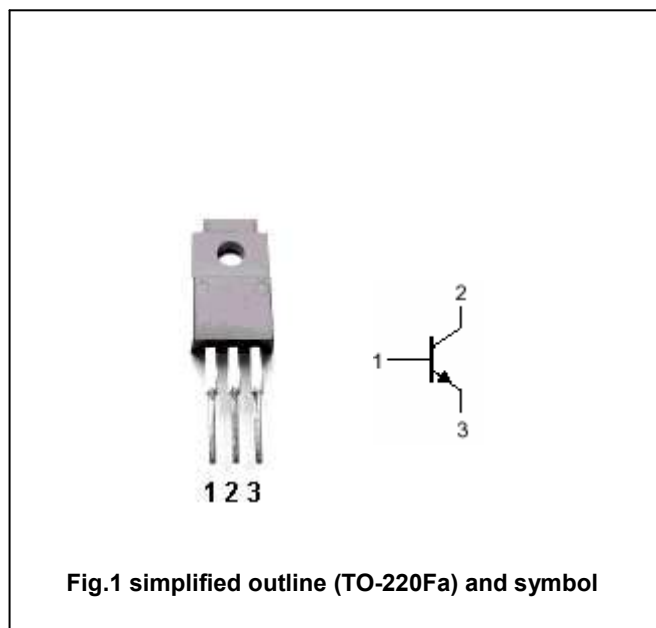
- With TO-220Fa package
- High voltage
- High speed switching

APPLICATIONS

- 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	1200	V
V_{CEO}	Collector-emitter voltage	Open base	700	V
V_{EBO}	Emitter-base voltage	Open collector	7.5	V
I_C	Collector current		8	A
I_{CM}	Collector current (peak)		15	A
I_B	Base current		4	A
I_{BM}	Base current (peak)		6	A
P_T	Total power dissipation	$T_C=25^\circ\text{C}$	35	W
T_j	Junction temperature		150	$^\circ\text{C}$
T_{stg}	Storage temperature		-65~150	$^\circ\text{C}$

Silicon NPN Power Transistors

BU1508AF

CHARACTERISTICS

T_j=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{(BR)EBO}	Emitter-base breakdown voltage	I _E =1mA ; I _C =0	7.5	13.5		V
V _{CEO(SUS)}	Collector-emitter sustaining voltage	I _C =100mA ; I _B =0; L=25mH	700			V
V _{CEsat}	Collector-emitter saturation voltage	I _C =4.5A; I _B =1.1A			1.0	V
V _{BEsat}	Base-emitter saturation voltage	I _C =4.5A; I _B =1.7A			1.1	V
I _{CES}	Collector cut-off current	V _{CE} =rated; 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 =4.5A ; V _{CE} =1V	4.0	5.5	7.0	
C _C	Collector output capacitance	I _E =0; f=1MHz; V _{CB} =10V		80		pF

Silicon NPN Power Transistors

BU1508AF

PACKAGE OUTLINE

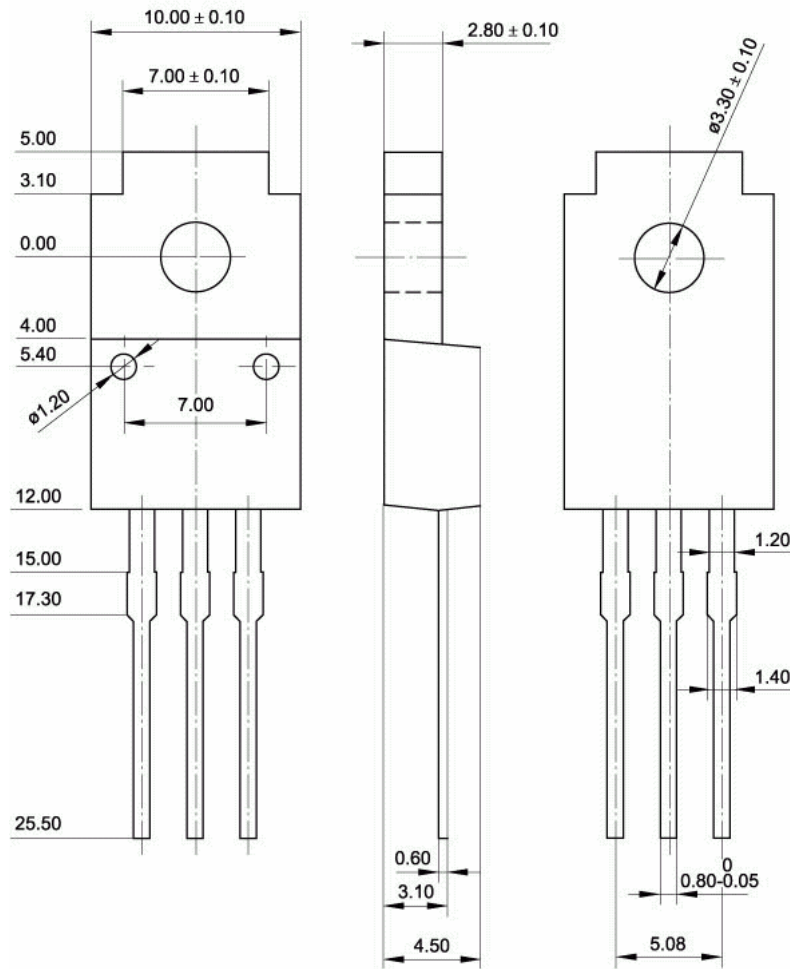


Fig.2 Outline dimensions