

Silicon NPN Power Transistors

BU508A

DESCRIPTION

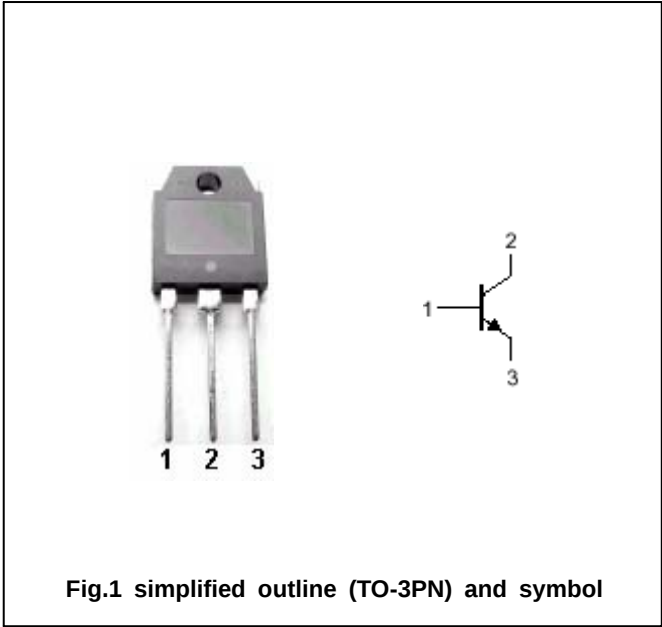
- With TO-3PN package
- High voltage
- High speed switching

APPLICATIONS

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

PINNING

PIN	DESCRIPTION
1	Base
2	Collector;connected to mounting base
3	Emitter



Absolute maximum ratings (Ta=25)

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	10	V
I _C	Collector current (DC)		8	A
I _{CM}	Collector current (Pulse)		15	A
P _C	Collector power dissipation	T _C =25	125	W
T _j	Junction temperature		150	
T _{stg}	Storage temperature		-65~150	

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
R _{th j-c}	Thermal resistance junction case	1.0	/W

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CHARACTERISTICS

Tj=25 unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)EBO}$	Emitter-base breakdown voltage	$I_E=10mA$; $I_C=0$	10			V
$V_{CEO(SUS)}$	Collector-emitter sustaining voltage	$I_C=100mA$; $I_B=0$	700			V
V_{CEsat}	Collector-emitter saturation voltage	$I_C=4.5A$; $I_B=2A$			1.0	V
V_{BEsat}	Base-emitter saturation voltage	$I_C=4.5A$; $I_B=2A$			1.3	V
I_{CES}	Collector cut-off current	$V_{CE}=1500V$; $V_{BE}=0$ $T_C=125^\circ C$			1.0 2.0	mA
I_{EBO}	Emitter cut-off current	$V_{EB}=5V$; $I_C=0$			0.1	mA
h_{FE}	DC current gain	$I_C=1A$; $V_{CE}=5V$	8			
t_s	Storage time	$I_C=4.5A$; $V_{CC}=140V$ $I_B=1.8A$; $L_C=0.9mH$ $L_B=3\mu H$		7		μs
t_f	Fall time			0.55		μs
f_T	Transition frequency	$I_C=0.1A$; $V_{CE}=5V$		7		MHz

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PACKAGE OUTLINE

