

Silicon NPN Power Transistors

BU2508D

DESCRIPTION

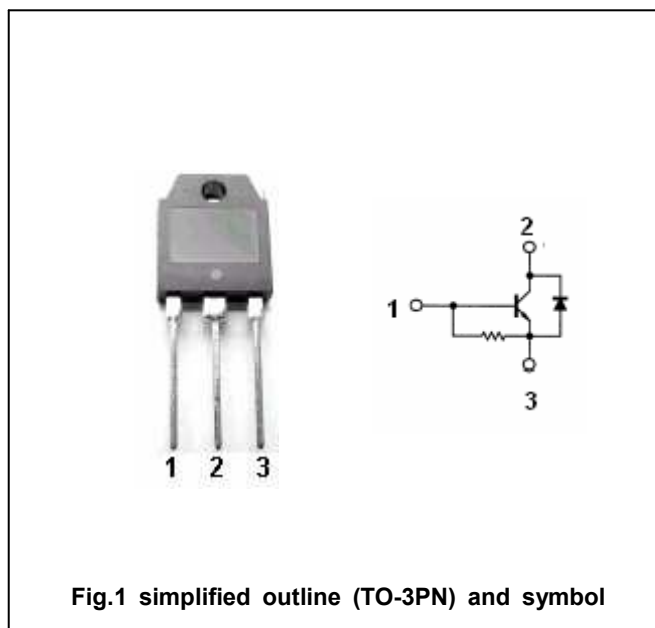
- With TO-3PN package
- High voltage;high speed
- Built-in damper diode

APPLICATIONS

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

PINNING

PIN	DESCRIPTION
1	Base
2	Collector;connected to mounting base
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
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_C	Collector power dissipation	$T_C=25^\circ\text{C}$	125	W
T_j	Junction temperature		150	$^\circ\text{C}$
T_{stg}	Storage temperature		-65~150	$^\circ\text{C}$

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CHARACTERISTICS

Tj=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{CEO(SUS)}$	Collector-emitter sustaining voltage	$I_C=0.1A$; $I_B=0$, $L=25mH$	700			V
$V_{(BR)EBO}$	Emitter-base breakdown voltage	$I_E=600mA$; $I_C=0$	7.5	13.5		V
$V_{CE(sat-1)}$	Collector-emitter saturation voltage	$I_C=4.5A$; $I_B=1.1A$			5.0	V
$V_{CE(sat-2)}$	Collector-emitter saturation voltage	$I_C=4.5A$; $I_B=1.29A$			1.0	V
$V_{BE(sat)}$	Base-emitter saturation voltage	$I_C=4.5A$; $I_B=1.7A$			1.3	V
I_{CES}	Collector cut-off current	$V_{CE}=rated$; $V_{BE}=0$ $T=125^\circ C$			1.0 2.0	mA
I_{EBO}	Emitter cut-off current	$V_{EB}=7.5V$; $I_C=0$	140		390	mA
h_{FE-1}	DC current gain	$I_C=1A$; $V_{CE}=5V$	7	13	23	
h_{FE-2}	DC current gain	$I_C=4.5A$; $V_{CE}=1V$	4	5.5	7.5	
V_F	Diode forward voltage	$I_F=4.5A$		1.6	2.0	V
C_C	Collector capacitance	$V_{CB}=10V$; $f=1MHz$		80		pF

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Fig.2 outline dimensions (unindicated tolerance:±0.10 mm)