

Silicon NPN Power Transistors

BU208A

DESCRIPTION

- With TO-3 package
- High voltage ,high speed

APPLICATIONS

- For use in horizontal deflection output stages for color TV receivers.

PINNING(see fig.2)

PIN	DESCRIPTION
1	Base
2	Emitter
3	Collector



Fig.1 simplified outline (TO-3) and symbol

Absolute maximum ratings($T_a = \square$)

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	5	V
I_C	Collector current		5	A
I_{CM}	Collector current-peak		7.5	A
I_B	Base current		0.1	A
I_{BM}	Base current-peak		2.5	A
P_T	Total power dissipation	$T_C = 25\square$	150	W
T_j	Junction temperature		115	$\square$
T_{stg}	Storage temperature		-65~150	$\square$

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j-C}$	Thermal resistance junction to case	1.0	$\square/W$

Silicon NPN Power Transistors

BU208A

CHARACTERISTICS

Tj=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{CEQ(SUS)}$	Collector-emitter sustaining voltage	$I_C=0.1A$; $I_B=0$; $L=25mH$	700			V
$V_{(BR)EBO}$	Emitter-base breakdown voltage	$I_E=10mA$; $I_C=0$	5			V
V_{CEsat}	Collector-emitter saturation voltage	$I_C=4.5A$; $I_B=2A$			1.0	V
V_{BEsat}	Base-emitter saturation voltage	$I_C=4.5A$; $I_B=2A$			1.5	V
I_{CES}	Collector cut-off current	$V_{CE}=1500V$; $V_{BE}=0$			1.0	mA
I_{EBO}	Emitter cut-off current	$V_{EB}=5V$; $I_C=0$			0.1	mA
h_{FE-1}	DC current gain	$I_C=1A$; $V_{CE}=5V$	8			
h_{FE-2}	DC current gain	$I_C=4.5A$; $V_{CE}=5V$	2.25			
C_{OB}	Output capacitance	$I_E=0$; $V_{CB}=10V$; $f=1MHz$		125		pF
f_T	Transition frequency	$I_C=0.1A$; $V_{CE}=15V$		7		MHz
t_s	Storage time	$I_C=4.5A$; $I_B=1.8A$ $L_B=10\mu H$			10	μs
t_f	Fall time				0.7	μs

Silicon NPN Power Transistors

BU208A

PACKAGE OUTLINE

