Silicon NPN Power Transistors BU208D

DESCRIPTION

- With TO-3 package
- Built-in damper diode
- High voltage capability

APPLICATIONS

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

PINNING(see fig.2)

PIN	DESCRIPTION
1	Base
2	Emitter
3	Collector

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

Absolute maximum ratings(Ta=℃)

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	10	V
I_C	Collector current		8	A
I_{CM}	Collector current-peak		15	A
P_T	Total power dissipation	T_C=25℃	150	W
T_j	Junction temperature		175	℃
T_{stg}	Storage temperature		-65~175	℃

THERMAL CHARACTERISTICS

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

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CHARACTERISTICS

Tj=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{CEO(SUS}$	Collector-emitter sustaining voltage	I_C=0.1A; I_B=0;	700			V
V_{CEsat}	Collector-emitter saturation voltage	I_C=4.5 A;I_B=2 A			1.0	V
V_{BEsat}	Base-emitter saturation voltage	I_C=4.5 A;I_B=2 A			1.3	V
I_{CES}	Collector cut-off current	V_{CE}=1500V;V_{BE}=0 Tj=125℃			1.0 2.0	mA
I_{EBO}	Emitter cut-off current	V_{EB}=5V; I_C=0			300	mA
h_{FE}	DC current gain	I_C=1A ; V_{CE}=5V	8			
V_F	Diode forward voltage	I_F=4A			2.0	V
f_T	Transition frequency	I_C=0.1A ; V_{CE}=5V		7		MHz
t_s	Storage time	I_C=4.5A;I_B=1.8A;V_{CC}=140V L_C=0.9Mh;L_B=3 μ H		7		μ s
t_f	Fall time			0.55		μ s

PACKAGE OUTLINE

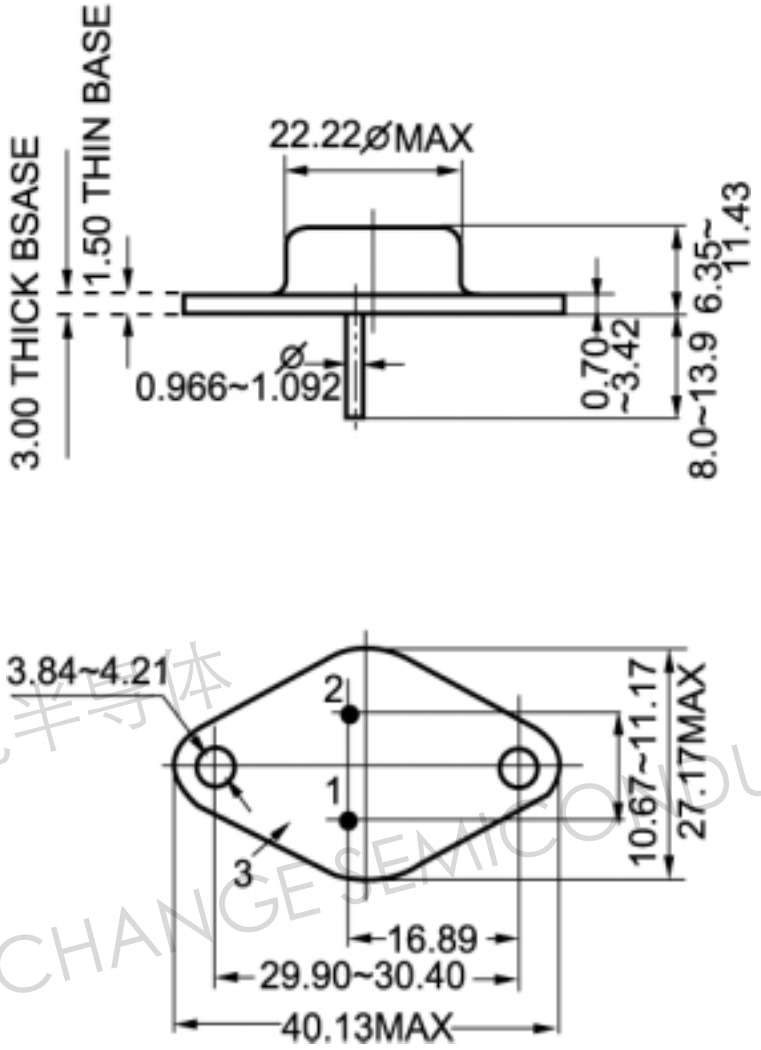

Fig.2 Outline dimensions