

Silicon NPN Power Transistors

BU508DFI

DESCRIPTION

- With TO-3PML 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
3	Emitter

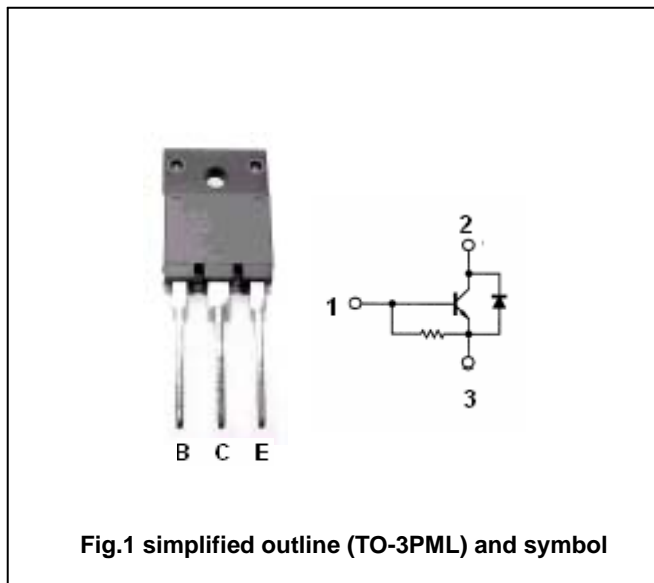


Fig.1 simplified outline (TO-3PML) and symbol

Absolute maximum ratings(Ta=25)

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 (DC)		8	A
I _{CP}	Collector current (Pulse)		15	A
P _{tot}	Total power dissipation	T _C =25	50	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 to case	2.5	/W

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CHARACTERISTICS

T_j=25 unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
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 _j =125			1.0 2.0	mA
I _{EBO}	Emitter cut-off current	V _{EB} =5.0V; I _C =0			300	mA
h _{FE}	DC current gain	I _C =1A ; V _{CE} =5V	8			
f _T	Transition frequency	I _C =0.1A ; V _{CE} =5V		7		MHz
V _F	Diode forward voltage	I _F =4A			2.0	V
t _s	Storage time	I _C =4.5A ; V _{CC} =140V I _B =1.8A; L _B =3mH L _C =0.9mH		7		μs
t _f	Fall time			0.55		μs

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PACKAGE OUTLINE

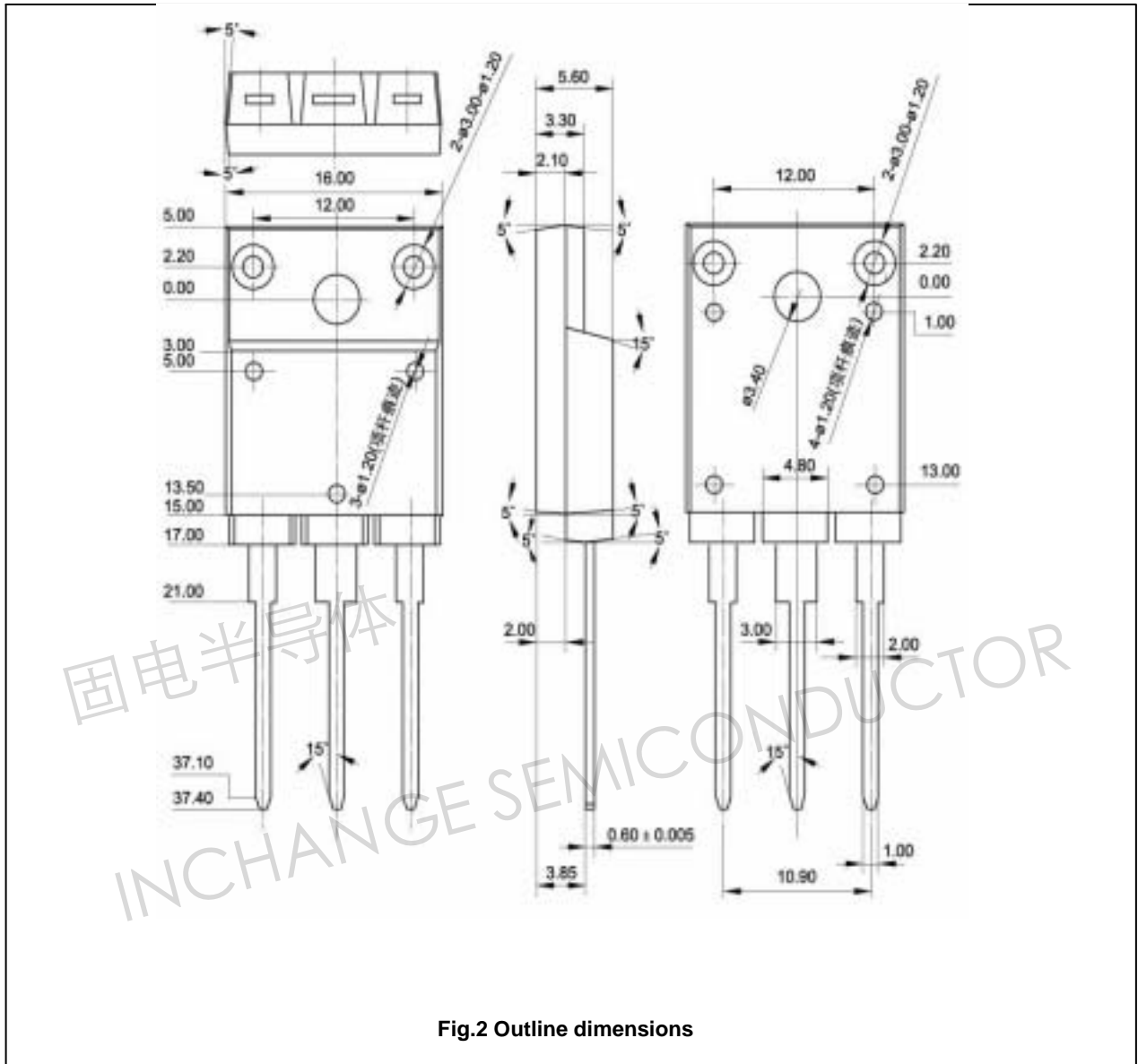


Fig.2 Outline dimensions