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.

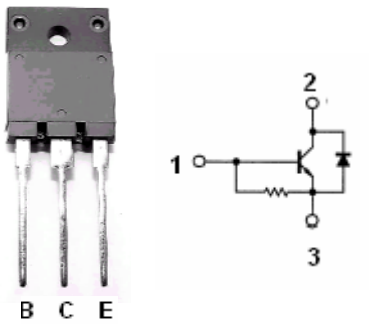

Fig.1 simplified outline (TO-3PML) and symbol

PINNING

PIN	DESCRIPTION
1	Base
2	Collector
3	Emitter

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
$R_{th\ j\text{-}C}$	Thermal resistance junction to case	2.5	□/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=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

PACKAGE OUTLINE

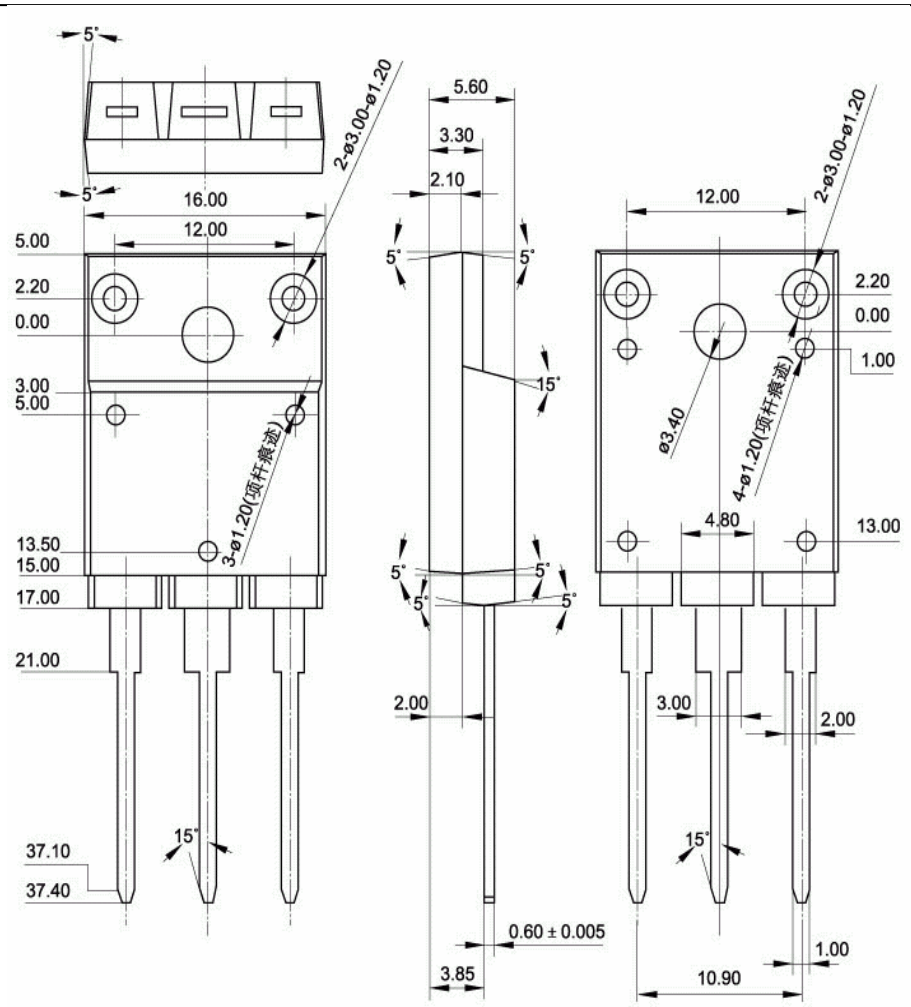

Fig.2 Outline dimensions