

Silicon NPN Power Transistors

BUH313

DESCRIPTION

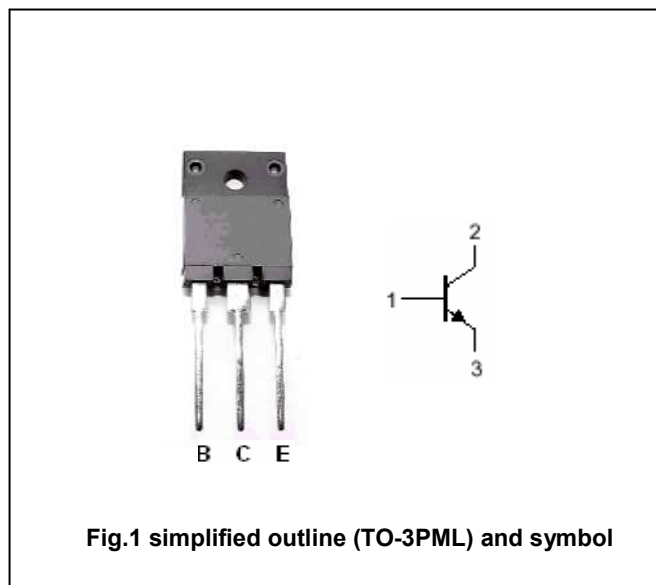
- With TO-3PML package
- High voltage
- High speed switching

APPLICATIONS

- Horizontal deflection for color TV
- Switch mode power supplies.

PINNING

PIN	DESCRIPTION
1	Base
2	Collector
3	Emitter

Absolute maximum ratings($T_a=25^\circ\text{C}$)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	Open emitter	1300	V
V_{CEO}	Collector-emitter voltage	Open base	600	V
V_{EBO}	Emitter-base voltage	Open collector	10	V
I_C	Collector current (DC)		5	A
I_{CM}	Collector current-peak	$t_p < 5\text{ms}$	10	A
P_{tot}	Total power dissipation	$T_C=25^\circ\text{C}$	50	W
T_j	Operating junction temperature		150	$^\circ\text{C}$
T_{stg}	Storage temperature		-65~150	$^\circ\text{C}$

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CHARACTERISTICS

T_j=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{CEO(SUS)}	Collector-emitter sustaining voltage	I _C =100mA; I _B =0	600			V
V _{(BR)EBO}	Emitter-base breakdown voltage	I _E =10mA; I _C =0	10			V
V _{CEsat}	Collector-emitter saturation voltage	I _C =3A; I _B =0.75A			1.5	V
V _{BEsat}	Base-emitter saturation voltage	I _C =3A; I _B =0.75A			1.3	V
I _{CES}	Collector cut-off current	V _{CE} =1300V; V _{BE} =0			0.2	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	10			
h _{FE-2}	DC current gain	I _C =3A; V _{CE} =5V	5.5			

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
R _{th j-c}	Thermal resistance from junction to case	2.8	°C/W

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PACKAGE OUTLINE

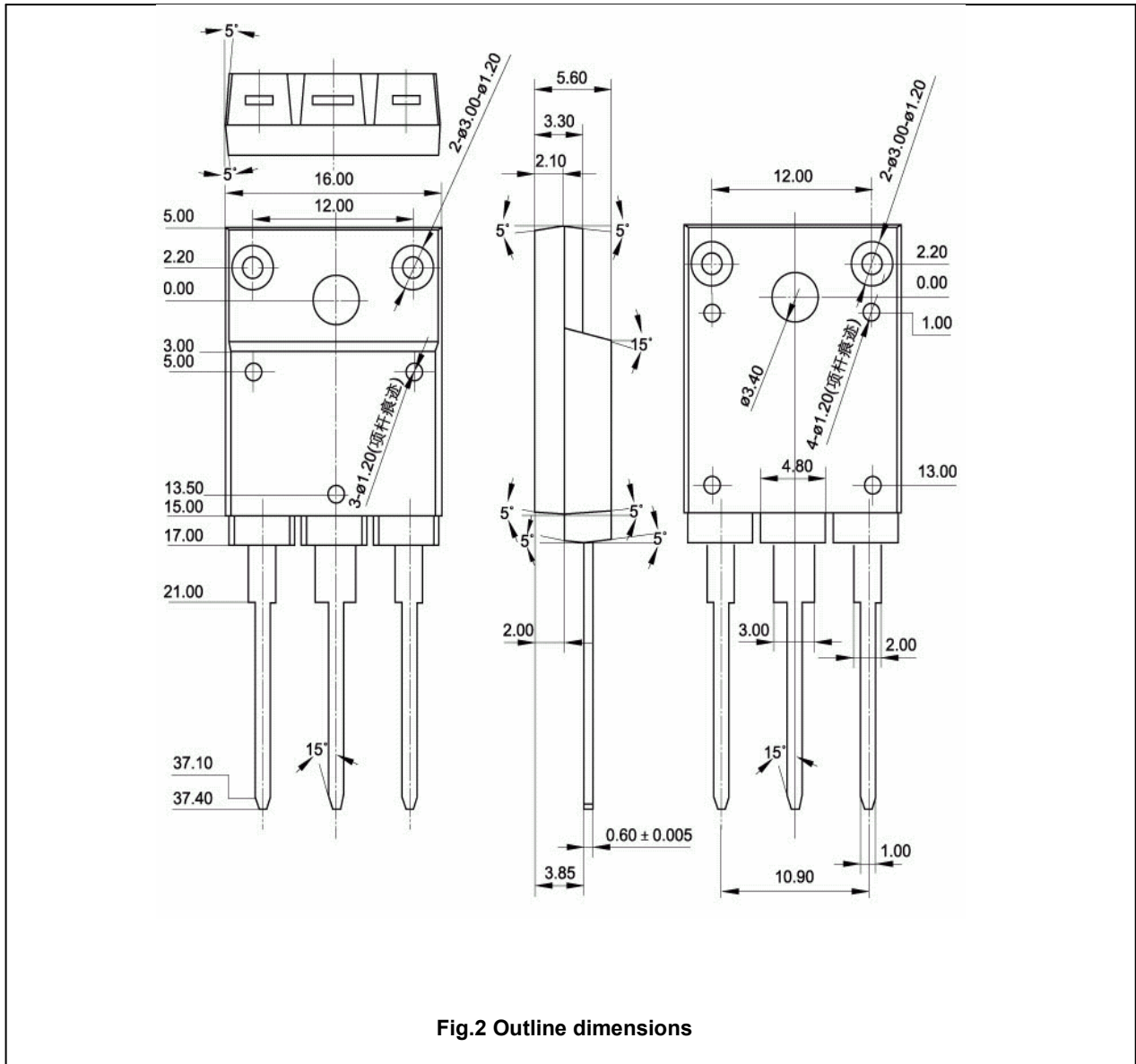


Fig.2 Outline dimensions