Silicon NPN Power Transistors BUH1015HI

DESCRIPTION

·With TO-3PML package.

·High voltage.

·High switching speed.

APPLICATIONS

·Horizontal deflection for colour TV and monitors.

PINNING

PIN	DESCRIPTION
1	Base
2	Collector;connected to mounting base
3	Emitter

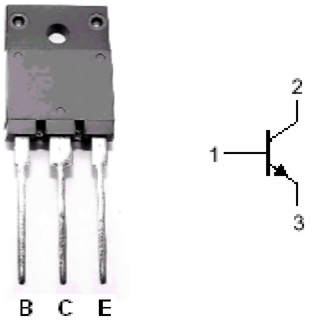

Fig.1 simplified outline (TO-3PML) and symbol

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)		14	A
I_{CM}	Collector current -peak	t_p<5ms	18	A
I_B	Base current		8	A
I_{BM}	Base current -peak	t_p<5ms	11	A
P_C	Collector power dissipation	T_C=25℃	70	W
T_j	Junction temperature		150	℃
T_{stg}	Storage temperature		-65~150	℃

CHARACTERISTICS

Tj=25□ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)EBO}$	Emitter-base breakdown voltage	I_E=10mA; I_C=0	10			V
$V_{CEO(SUS)}$	Collector-emitter sustaining voltage	I_C=100mA; I_B=0	700			V
V_{CEsat}	Collector-emitter saturation voltage	I_C=10A; I_B=2A			1.5	V
V_{BEsat}	Base-emitter saturation voltage	I_C=10A; I_B=2A			1.5	V
I_{CES}	Collector cut-off current	V_{CE}=1500V ;V_{BE}=0 T_j=125□			0.2 2	mA
I_{EBO}	Emitter cut-off current	V_{EB}=5V; I_C=0			0.1	mA
h_{FE}	DC current gain	I_C=10A ; V_{CE}=5V T_j=100□	7 5		14	

Switching times resistive load

t_s	Storage time	I_C=10A;I_{B1}=2A;I_{B2}=-6A; V_{CC}=400V		1.5		μs
t_f	Fall time			110		ns

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j\text{-}case}$	Thermal resistance junction case	1.8	□/W

PACKAGE OUTLINE

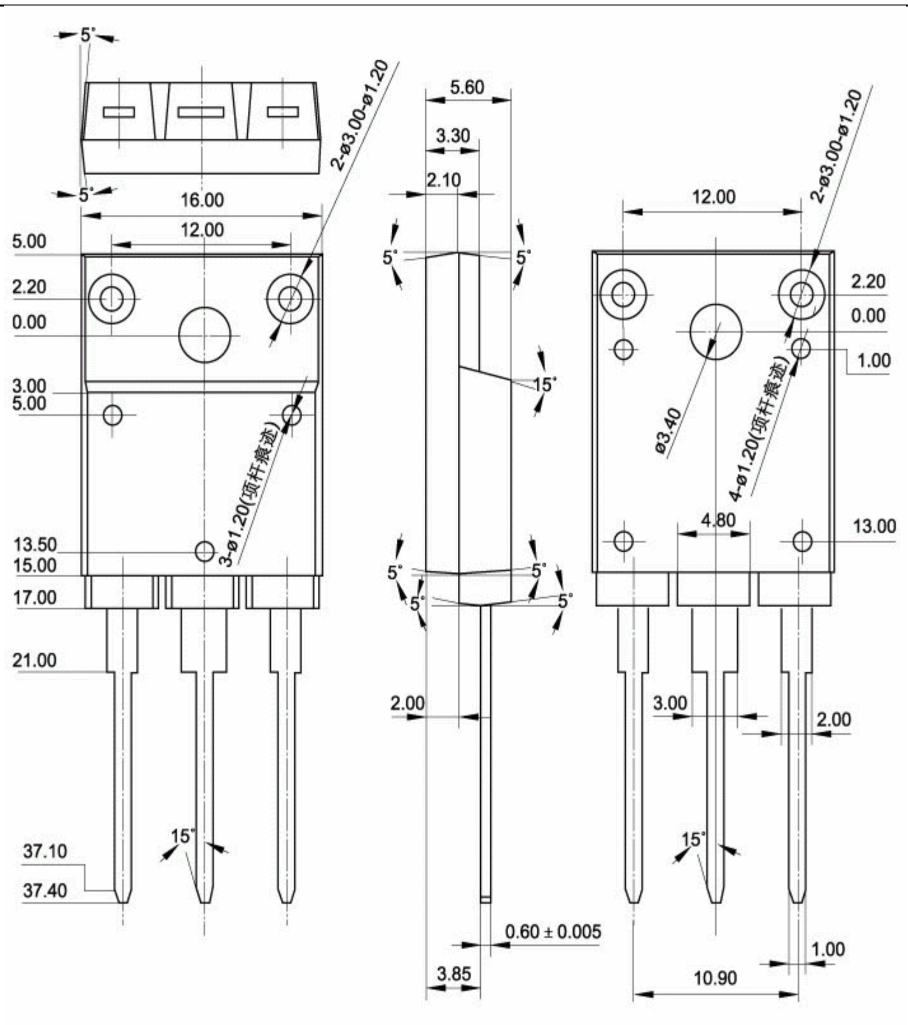

Fig.2 Outline dimensions