

Silicon NPN Power Transistors

BUH1015HI

DESCRIPTION

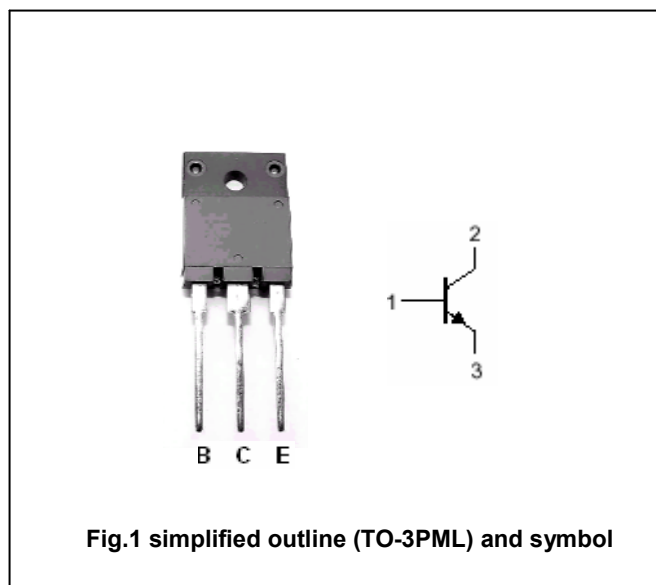
- With TO-3PML package.
- High voltage.
- High switching speed.

APPLICATIONS

- Horizontal deflection for colour TV and monitors.

PINNING

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

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

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	$t_p < 5\text{ms}$	18	A
I_B	Base current		8	A
I_{BM}	Base current -peak	$t_p < 5\text{ms}$	11	A
P_C	Collector power dissipation	$T_C=25^\circ\text{C}$	70	W
T_j	Junction temperature		150	$^\circ\text{C}$
T_{stg}	Storage temperature		-65~150	$^\circ\text{C}$

Silicon NPN Power Transistors

BUH1015HI

CHARACTERISTICS

T_j=25°C 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°C			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°C	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-case}	Thermal resistance junction case	1.8	°C/W

BUH1015HI