

Silicon NPN Power Transistors

BUH515D

DESCRIPTION

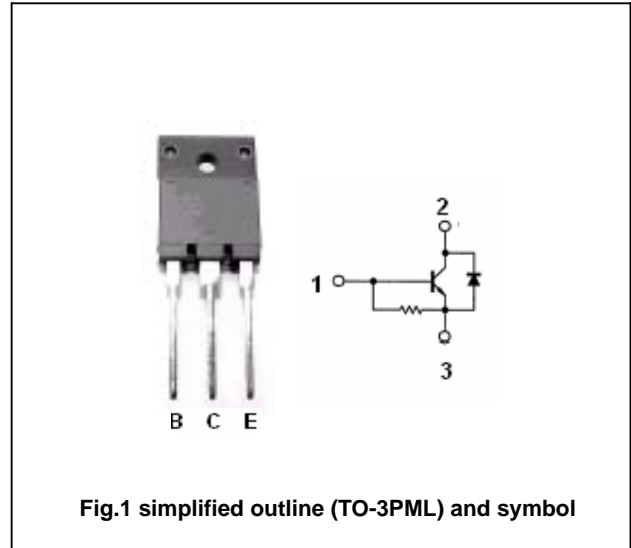
- With TO-3PML package
- High voltage
- High speed switching
- Built-in damper diode

APPLICATIONS

- For use in horizontal deflection circuits of large screen color TV receivers

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	1500	V
V_{CEO}	Collector-emitter voltage	Open base	700	V
V_{EBO}	Emitter-base voltage	Open collector	5	V
I_C	Collector current (DC)		8	A
I_{CM}	Collector current -peak		15	A
I_B	Base current (DC)		5	A
I_{BM}	Base current -peak		8	A
P_{tot}	Total power dissipation	$T_C=25$	50	W
T_{stg}	Storage temperature		-65~150	

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CHARACTERISTICS

T_j=25 unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{CEsat}	Collector-emitter saturation voltage	I _C =5A ; I _B =1.25A			1.5	V
V _{BEsat}	Base-emitter saturation voltage	I _C =5A ; I _B =1.25A			1.3	V
I _{CES-1}	Collector cut-off current	V _{CE} =1300V; V _{BE} =0			10	μA
I _{CES-2}	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			200	mA
h _{FE}	DC current gain	I _C =5A ; V _{CE} =5V	5		10	
V _F	Diode forward voltage	I _F =5A			2	V

Switching times

t _s	Storage time	I _C =5A; I _{B1} =1.5A; -I _{B2} =2.5A; V _{CC} =400V		2.4	3.6	μs
t _f	Fall time			170	260	ns

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
R _{th j-c}	Thermal resistance from junction to case	2.5	/W

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PACKAGE OUTLINE

