

Silicon Power Transistors

BUV46A

DESCRIPTION

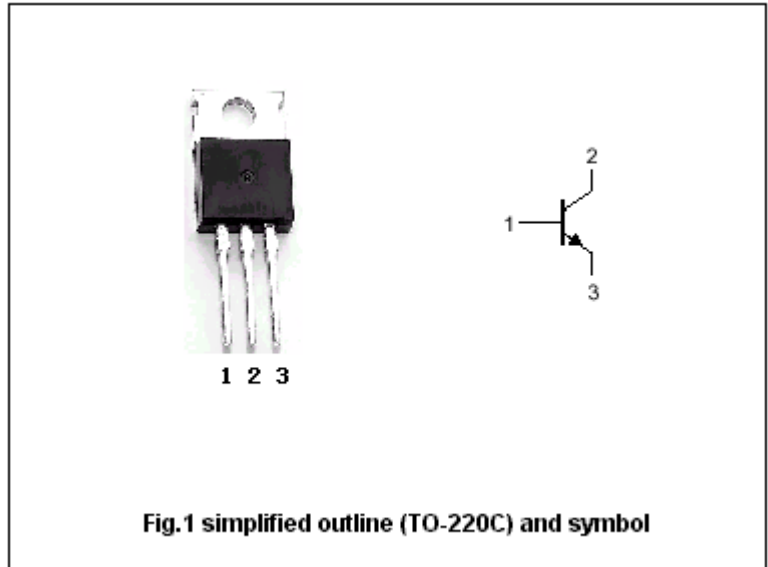
- With TO-220C package
- High voltage
- Fast switching

APPLICATIONS

- General purpose switching
- Switch mode power supplies
- Electronic ballasts for fluorescent lighting

PINNING

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



LIMITING VALUES

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	Open emitter	1000	V
V_{CEO}	Collector-emitter voltage	Open base	450	V
V_{EBO}	Emitter-base voltage	Open collector	7	V
I_C	Collector current (DC)		5	A
I_B	Base current		3	A
P_{tot}	Total power dissipation	$T_C=25$	70	W
T_j	Max.operating junction temperature		150	
T_{stg}	Storage temperature		-65~150	

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	Max	UNIT
$R_{th\ j-case}$	Thermal resistance junction case	1.76	/W

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CHARACTERISTICS

T_j=25 unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{CE0(SUS)}	Collector-emitter sustaining voltage	I _C =100mA ; I _B =0	450			V
V _{CEsat-1}	Collector-emitter saturation voltage	I _C =2A I _B =0.4A			1.5	V
V _{CEsat-2}	Collector-emitter saturation voltage	I _C =3A I _B =0.6A			5.0	V
V _{BESat-1}	Emitter-base saturation voltage	I _C =2A I _B =0.4A			1.3	V
I _{CBO}	Collector cut-off current	V _{CB} =BV _{CBO} I _E =0 T _C =125			0.3 2	mA
I _{EBO}	Emitter cut-off current	V _{EB} =7V I _C =0			1	mA

Switching times resistive load

t _{on}	Turn-on time	I _C =2A I _{B1} =- I _{B2} =0.4A V _{CC} =150V			1.0	μs
t _s	Storage time				3.0	μs
t _f	Fall time				0.8	μs

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PACKAGE OUTLINE

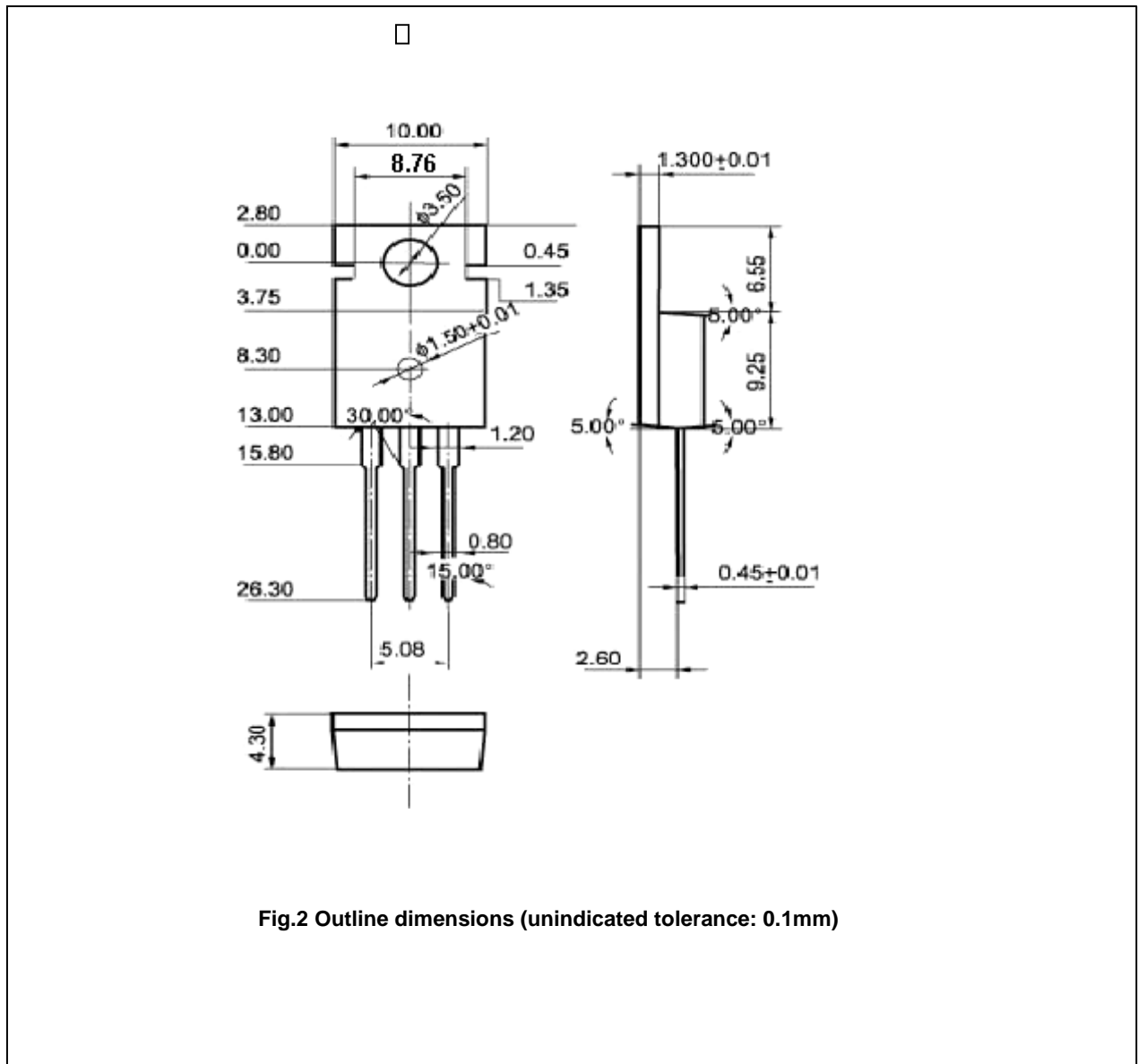


Fig.2 Outline dimensions (unindicated tolerance: 0.1mm)