

Silicon NPN Power Transistors

BUV28

DESCRIPTION

- With TO-220C package
- Low collector saturation voltage
- Fast switching speed

APPLICATIONS

- High frequency and efficiency converters
- Switching regulators
- Motor control

PINNING

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

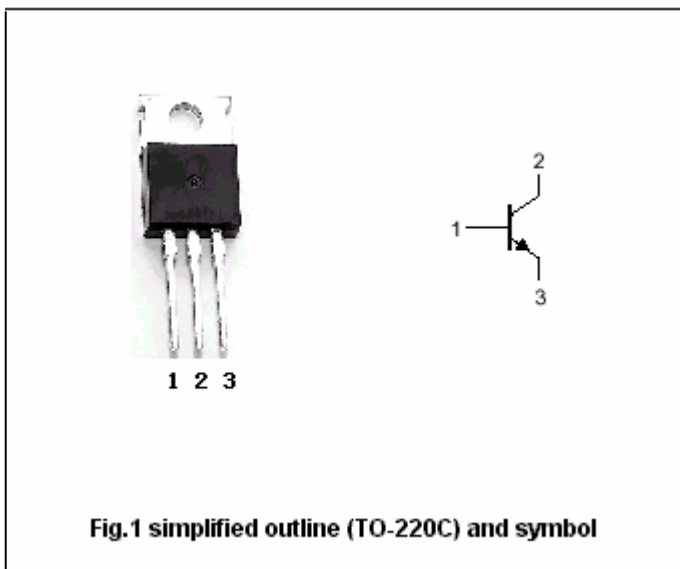


Fig.1 simplified outline (TO-220C) and symbol

Absolute maximum ratings (Tc=25)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	Open emitter	400	V
V_{CEO}	Collector-emitter voltage	Open base	200	V
V_{EBO}	Emitter-base voltage	Open collector	7	V
I_C	Collector current		10	A
I_B	Base current		2	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	1.785	/W

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CHARACTERISTICS

T_j=25 unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{(BR)CEO}	Collector-emitter breakdown voltage	I _C =30m A ; I _B =0	200			V
V _{CEsat-1}	Collector-emitter saturation voltage	I _C =3A ; I _B =0.3 A			0.7	V
V _{CEsat-2}	Collector-emitter saturation voltage	I _C =6A; I _B =0.6A			1.5	V
V _{BEsat}	Base-emitter saturation voltage	I _C =6A; I _B =0.6A			2.0	V
I _{CBO}	Collector cut-off current	V _{CB} =300V; I _E =0			1.0	mA
I _{EBO}	Emitter cut-off current	V _{EB} =5V; I _C =0			1.0	mA

Switching times resistive load

t _{on}	Turn-on time				1.0	ms
t _s	Storage time	I _C =5A; V _{CC} =150V I _{B1} =-I _{B1} =0.5A;			1.5	μs
t _f	Fall time				0.3	μs

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PACKAGE OUTLINE

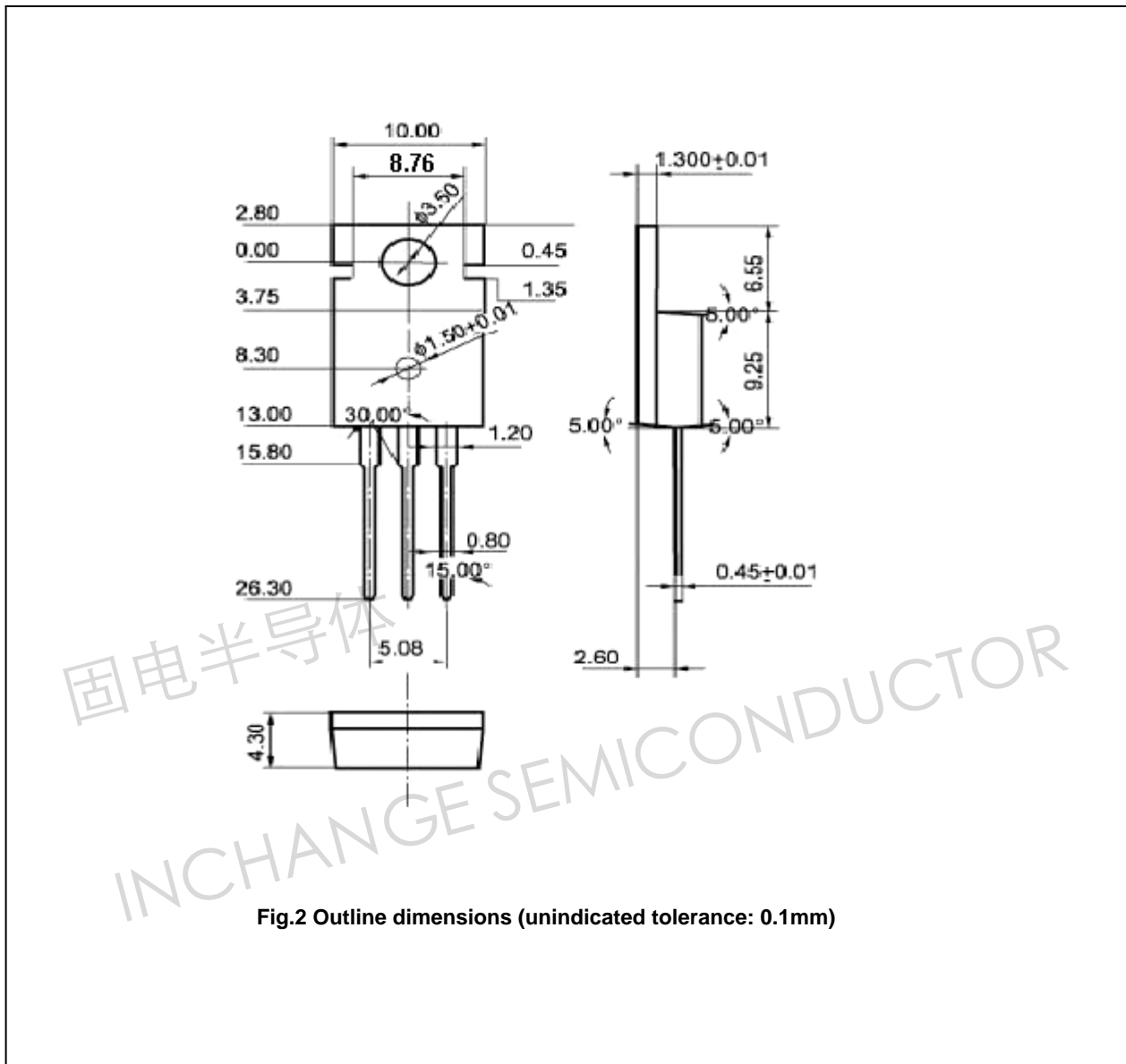


Fig.2 Outline dimensions (unindicated tolerance: 0.1mm)