

Inchange Semiconductor

Product Specification

Silicon NPN Power Transistors

BUV28

DESCRIPTION

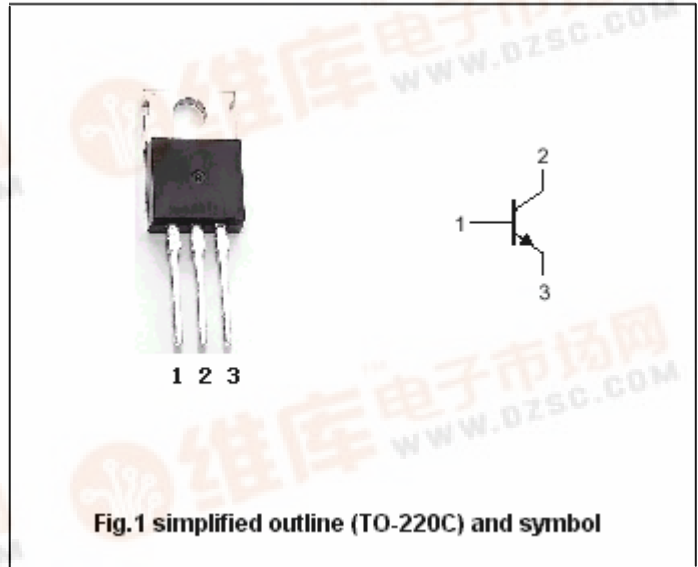
- With TO-220C package
- Low collector saturation voltage
- Fast switching speed

APPLICATIONS

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

PINNING

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



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 =30mA ; I _B =0	200			V
V _{CEsat-1}	Collector-emitter saturation voltage	I _C =3A ; I _B =0.3A			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	I _C =5A; V _{CC} =150V I _{B1} =-I _{B1} =0.5A;			1.0	ms
t _s	Storage time				1.5	μs
t _f	Fall time				0.3	μs

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PACKAGE OUTLINE

