

## Silicon NPN Power Transistors

## BUV26A

## DESCRIPTION

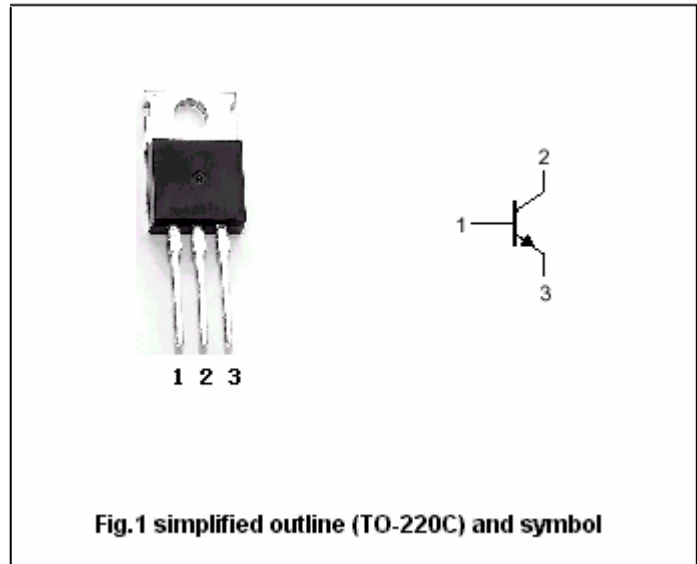
- With TO-220C package
- Low collector saturation voltage
- Fast switching speed

## APPLICATIONS

- For use in high frequency and efficiency converters, switching regulators and motor control

## PINNING

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

Absolute maximum ratings (T<sub>c</sub>=25 °C)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V <sub>CBO</sub>	Collector-base voltage	Open emitter	200	V
V <sub>CEO</sub>	Collector-emitter voltage	Open base	100	V
V <sub>EBO</sub>	Emitter-base voltage	Open collector	5	V
I <sub>C</sub>	Collector current (DC)		14	A
I <sub>CM</sub>	Collector current (peak)		25	A
I <sub>B</sub>	Base current		4	A
I <sub>BM</sub>	Base current (peak)		6	A
P <sub>tot</sub>	Total power dissipation	T <sub>C</sub> =25	65	W
T <sub>j</sub>	Max.operating junction temperature		150	
T <sub>stg</sub>	Storage temperature		-65~150	

## THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
R <sub>th j-mb</sub>	Thermal resistance junction to mounting base	1.92	K/W

## Silicon NPN Power Transistors

## BUV26A

## CHARACTERISTICS

T<sub>j</sub>=25 unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V <sub>CE0(SUS)</sub>	Collector-emitter sustaining voltage	I <sub>C</sub> =0.2 A ; I <sub>B</sub> =0; L=25mH	100			V
V <sub>CEsat-1</sub>	Collector-emitter saturation voltage	I <sub>C</sub> =5A ; I <sub>B</sub> =0.5 A			0.5	V
V <sub>CEsat-2</sub>	Collector-emitter saturation voltage	I <sub>C</sub> =10A; I <sub>B</sub> =1A			1.0	V
V <sub>BEsat-1</sub>	Base-emitter saturation voltage	I <sub>C</sub> =5A ; I <sub>B</sub> =0.5 A			1.2	V
V <sub>BEsat-2</sub>	Base-emitter saturation voltage	I <sub>C</sub> =10A; I <sub>B</sub> =1A			1.5	V
I <sub>CEX</sub>	Collector cut-off current	V <sub>CE</sub> =200V; V <sub>BE</sub> =-1.5V; T <sub>j</sub> =125			1.0	mA
I <sub>EBO</sub>	Emitter cut-off current	V <sub>EB</sub> =5V; I <sub>C</sub> =0			1.0	mA

Switching times resistive load

t <sub>on</sub>	Turn-on time	I <sub>C</sub> =10A; I <sub>B1</sub> =1A; I <sub>B2</sub> =2A V <sub>CE</sub> =50V		0.4	0.6	ms
t <sub>s</sub>	Storage time			0.45	1.0	μs
t <sub>f</sub>	Fall time			0.12	0.25	μs

Silicon NPN Power Transistors

BUV26A

PACKAGE OUTLINE



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