

## Silicon NPN Power Transistors

2SC2022

## DESCRIPTION

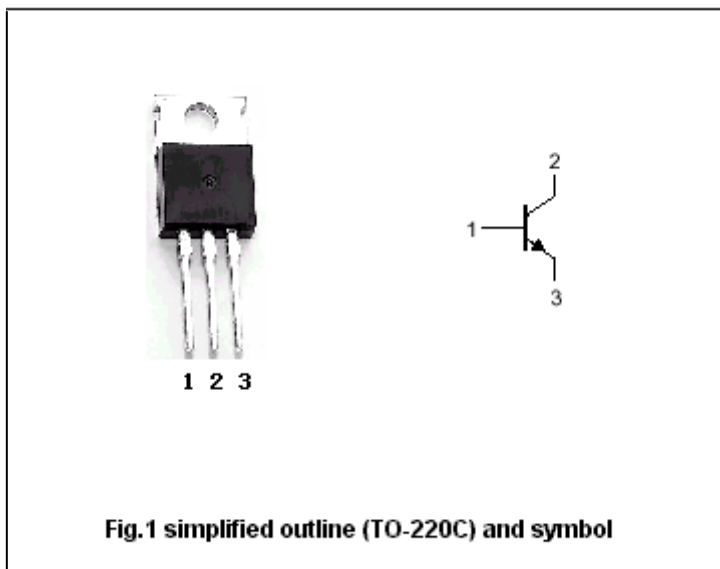
- With TO-220C package
- High voltage

## APPLICATIONS

- Series regulator, switch, and general purpose applications

## PINNING

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



## Absolute maximum ratings(Ta=25°C)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
$V_{CBO}$	Collector-base voltage	Open emitter	300	V
$V_{CEO}$	Collector-emitter voltage	Open base	300	V
$V_{EBO}$	Emitter-base voltage	Open collector	6	V
$I_C$	Collector current		1	A
$P_C$	Collector dissipation	$T_C=25^\circ\text{C}$	30	W
$T_j$	Junction temperature		150	$^\circ\text{C}$
$T_{stg}$	Storage temperature		-50~150	$^\circ\text{C}$

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## CHARACTERISTICS

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

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V <sub>(BR)CEO</sub>	Collector-emitter breakdown voltage	I <sub>C</sub> =25mA ; I <sub>B</sub> =0	300			V
V <sub>(BR)CBO</sub>	Collector-base breakdown voltage	I <sub>C</sub> =1mA ; I <sub>E</sub> =0	300			V
V <sub>(BR)EBO</sub>	Emitter-base breakdown voltage	I <sub>E</sub> =1mA ; I <sub>C</sub> =0	6			V
V <sub>CEsat</sub>	Collector-emitter saturation voltage	I <sub>C</sub> =500mA ; I <sub>B</sub> =100mA			1.0	V
I <sub>CBO</sub>	Collector cut-off current	V <sub>CB</sub> =300V ; I <sub>E</sub> =0			1.0	mA
I <sub>EBO</sub>	Emitter cut-off current	V <sub>EB</sub> =6V ; I <sub>C</sub> =0			1.0	mA
h <sub>FE</sub>	DC current gain	I <sub>C</sub> =200m A ; V <sub>CE</sub> =4V	30			
f <sub>T</sub>	Transition frequency	I <sub>C</sub> =100mA ; V <sub>CE</sub> =12V		10		MHz

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PACKAGE OUTLINE



Fig.2 Outline dimensions (unindicated tolerance: ±0.10 mm)