

Silicon PNP Power Transistors

2SB900

**DESCRIPTION**

- With TO-220C package
- Low collector saturation voltage
- Wide area of safe operation

**APPLICATIONS**

- For power amplifier and switching applications

**PINNING**

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

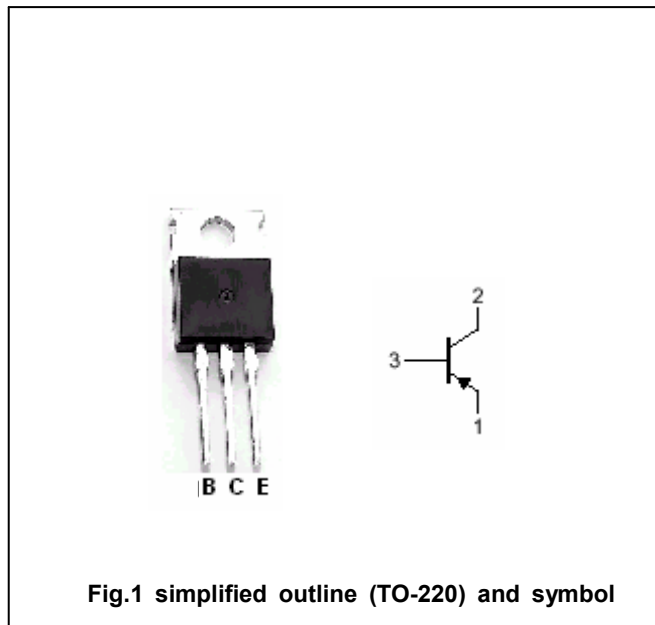


Fig.1 simplified outline (TO-220) and symbol

**Absolute maximum ratings(Ta=25°C)**

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V <sub>CBO</sub>	Collector-base voltage	Open emitter	-50	V
V <sub>CEO</sub>	Collector-emitter voltage	Open base	-50	V
V <sub>EBO</sub>	Emitter-base voltage	Open collector	-5	V
I <sub>C</sub>	Collector current (DC)		-4	A
P <sub>C</sub>	Collector dissipation	T <sub>C</sub> =25°C	40	W
T <sub>j</sub>	Junction temperature		150	°C
T <sub>stg</sub>	Storage temperature		-50~150	°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> =-1mA; I <sub>B</sub> =0	-50			V
V <sub>(BR)CBO</sub>	Collector-base breakdown voltage	I <sub>C</sub> =-1mA; I <sub>E</sub> =0	-50			V
V <sub>(BR)EBO</sub>	Emitter-base breakdown voltage	I <sub>E</sub> =-1mA; I <sub>C</sub> =0	-5			V
V <sub>CEsat</sub>	Collector-emitter saturation voltage	I <sub>C</sub> =-2A; I <sub>B</sub> =-0.2A			-1.0	V
V <sub>BE</sub>	Base-emitter on voltage	I <sub>C</sub> =-2A; V <sub>CE</sub> =-4V			-1.4	V
I <sub>CBO</sub>	Collector cut-off current	V <sub>CB</sub> =-50V; I <sub>E</sub> =0			-0.1	mA
I <sub>CEO</sub>	Collector cut-off current	V <sub>CE</sub> =-50V; I <sub>E</sub> =0			-1.0	mA
I <sub>EBO</sub>	Emitter cut-off current	V <sub>EB</sub> =-5V; I <sub>C</sub> =0			-0.1	mA
h <sub>FE</sub>	DC current gain	I <sub>C</sub> =-1A; V <sub>CE</sub> =-4V	40			

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PACKAGE OUTLINE



Fig.2 Outline dimensions (unindicated tolerance:  $\pm 0.10$ mm)