

**Silicon NPN Power Transistors**

**2SC2902**

**DESCRIPTION**

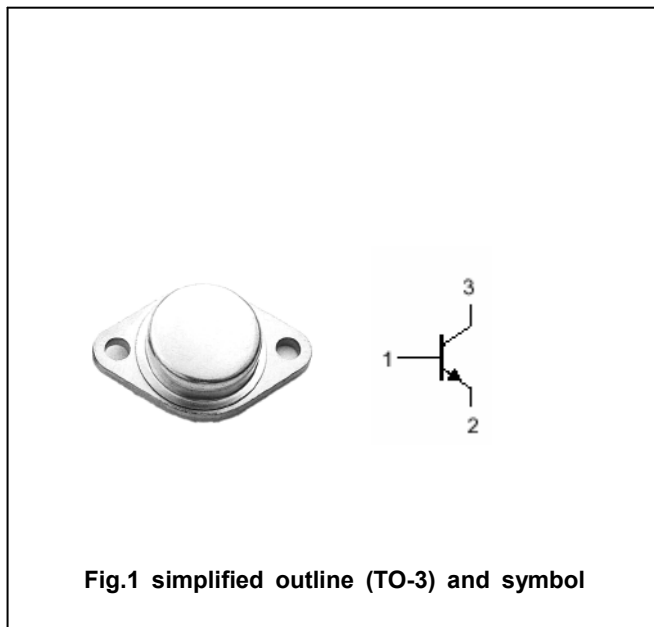
- With TO-3 package
- High voltage ,high speed

**APPLICATIONS**

- Converters
- Inverters
- Switching regulators
- Motor controls

**PINNING (See Fig.2)**

PIN	DESCRIPTION
1	Base
2	Emitter
3	Collector



**Fig.1 simplified outline (TO-3) and symbol**

**ABSOLUTE MAXIMUM RATINGS(Ta=25°C)**

SYMBOL	PARAMETER	CONDITIONS	MAX	UNIT
V <sub>CBO</sub>	Collector-base voltage	Open emitter	800	V
V <sub>CEO</sub>	Collector-emitter voltage	Open base	400	V
V <sub>EBO</sub>	Emitter-base voltage	Open collector	9	V
I <sub>C</sub>	Collector current		15	A
I <sub>CM</sub>	Collector current-Peak		30	A
P <sub>C</sub>	Collector power dissipation	T <sub>C</sub> =25°C	150	W
T <sub>j</sub>	Junction temperature		200	°C
T <sub>stg</sub>	Storage temperature		-65~200	°C

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## CHARACTERISTICS

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

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V <sub>CEO(SUS)</sub>	Collector-emitter sustaining voltage	I <sub>C</sub> =0.1A ; I <sub>B</sub> =0; L=25mH	400			V
V <sub>(BR)EBO</sub>	Emitter-base breakdown voltage	I <sub>E</sub> =1mA; I <sub>C</sub> =0	9			V
V <sub>CEsat</sub>	Collector-emitter saturation voltage	I <sub>C</sub> =7.5A; I <sub>B</sub> =2.5A			1.0	V
V <sub>BEsat</sub>	Base-emitter saturation voltage	I <sub>C</sub> =7.5A; I <sub>B</sub> =2.5A			1.5	V
I <sub>CB0</sub>	Collector cut-off current	V <sub>CB</sub> =640V; I <sub>E</sub> =0			50	μA
I <sub>EBO</sub>	Emitter cut-off current	V <sub>EB</sub> =9V; I <sub>C</sub> =0			50	μA
h <sub>FE</sub>	DC current gain	I <sub>C</sub> =7.5A ; V <sub>CE</sub> =5V	10		35	

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PACKAGE OUTLINE

