

Silicon NPN Power Transistors

2SC3322

**DESCRIPTION**

- With TO-3P(I) package
- High voltage
- High speed

**APPLICATIONS**

- High power switching applications

**PINNING**

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

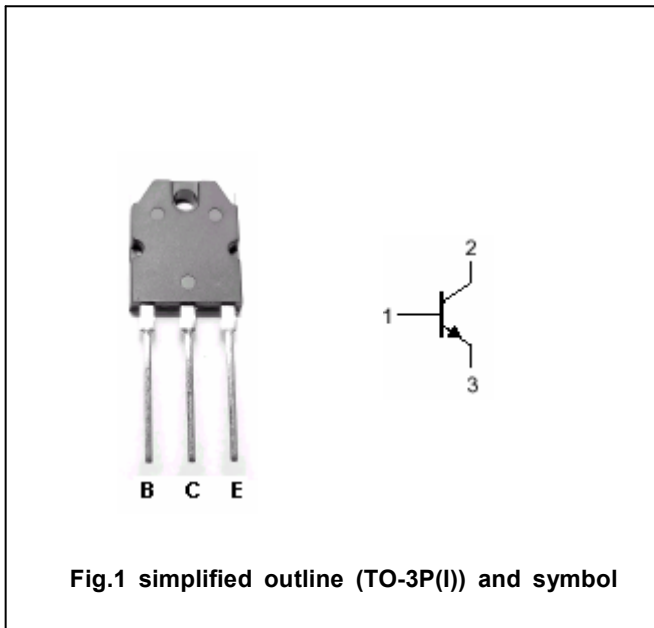


Fig.1 simplified outline (TO-3P(I)) and symbol

**Absolute maximum ratings(Ta=25°C)**

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V <sub>CBO</sub>	Collector-base voltage	Open emitter	900	V
V <sub>CEO</sub>	Collector-emitter voltage	Open base	800	V
V <sub>EBO</sub>	Emitter-base voltage	Open collector	7	V
I <sub>C</sub>	Collector current		5	A
I <sub>CM</sub>	Collector current-peak		10	A
I <sub>B</sub>	Base current		2.5	A
P <sub>T</sub>	Total power dissipation	T <sub>C</sub> =25°C	80	W
T <sub>j</sub>	Junction temperature		150	°C
T <sub>stg</sub>	Storage temperature		-55~150	°C

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## CHARACTERISTICS

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

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V <sub>CE0(SUS)</sub>	Collector-emitter sustaining voltage	I <sub>C</sub> =0.2A, L=100mH; R <sub>BE</sub> =∞	800			V
V <sub>(BR)EBO</sub>	Base-emitter breakdown voltage	I <sub>E</sub> =10mA; I <sub>C</sub> =0	7			V
V <sub>CEsat</sub>	Collector-emitter saturation voltage	I <sub>C</sub> =1.5A; I <sub>B</sub> =0.3A			1.0	V
V <sub>BE sat</sub>	Base-emitter saturation voltage	I <sub>C</sub> =1.5A; I <sub>B</sub> =0.3A			1.5	V
I <sub>CBO</sub>	Collector cut-off current	V <sub>CB</sub> =750V; I <sub>E</sub> =0			100	μA
I <sub>CEO</sub>	Collector cut-off current	V <sub>CE</sub> =650V; R <sub>BE</sub> =∞			100	μA
h <sub>FE-1</sub>	DC current gain	I <sub>C</sub> =0.5A; V <sub>CE</sub> =5V	15			
h <sub>FE-2</sub>	DC current gain	I <sub>C</sub> =3A; V <sub>CE</sub> =5V	7			

## Switching times

t <sub>on</sub>	Turn-on time	I <sub>C</sub> =3A; V <sub>CC</sub> ≈250V I <sub>B1</sub> =0.6A; I <sub>B2</sub> =-1.5A			1.0	μs
t <sub>stg</sub>	Storage time				3.0	μs
t <sub>f</sub>	Fall time				1.0	μs

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PACKAGE OUTLINE

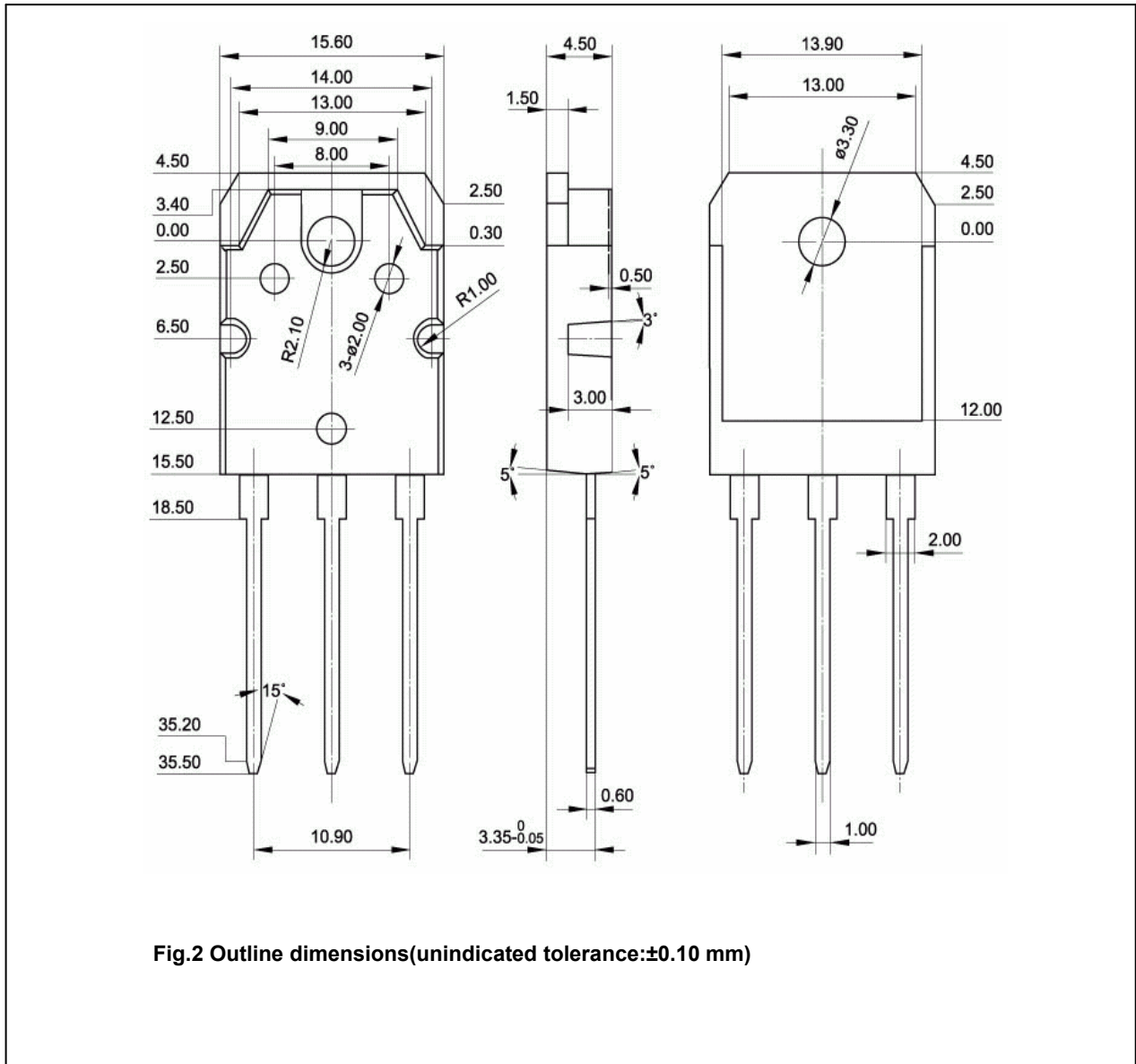


Fig.2 Outline dimensions(unindicated tolerance:±0.10 mm)