

**Silicon PNP Power Transistors**

**2SB757**

**DESCRIPTION**

- With TO-3PN package
- High collector current
- Wide area of safe operation
- Complement to type 2SD847

**APPLICATIONS**

- Audio amplifications
- Serie regulators
- General purpose power amplifiers

**PINNING**

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

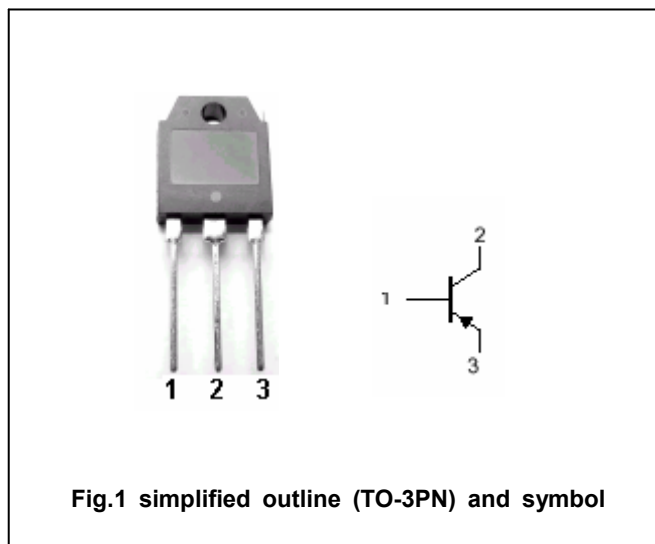


Fig.1 simplified outline (TO-3PN) and symbol

**ABSOLUTE MAXIMUM RATINGS (T<sub>C</sub>=25□)**

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V <sub>CBO</sub>	Collector-base voltage	Open emitter	-40	V
V <sub>CEO</sub>	Collector-emitter voltage	Open base	-40	V
V <sub>EBO</sub>	Emitter-base voltage	Open collector	-5	V
I <sub>C</sub>	Collector current		-15	A
I <sub>B</sub>	Base current		-5	A
P <sub>C</sub>	Collector power dissipation	T <sub>C</sub> =25□	80	W
T <sub>j</sub>	Junction temperature		150	□
T <sub>stg</sub>	Storage temperature		-55~150	□

**THERMAL CHARACTERISTICS**

SYMBOL	PARAMETER	VALUE	UNIT
R <sub>thj-c</sub>	Thermal resistance from junction to case	1.56	□/W

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## CHARACTERISTICS

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

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V <sub>(BR)CBO</sub>	Collector-base breakdown voltage	I <sub>C</sub> =-0.1mA; I <sub>E</sub> =0	-40			V
V <sub>(BR)CEO</sub>	Collector-emitter breakdown voltage	I <sub>C</sub> =-10mA; I <sub>B</sub> =0	-40			V
V <sub>(BR)EBO</sub>	Emitter-base breakdown voltage	I <sub>E</sub> =-0.1mA; I <sub>C</sub> =0	-5			V
V <sub>CE(sat)</sub>	Collector-emitter saturation voltage	I <sub>C</sub> =-5A; I <sub>B</sub> =-0.5A			-0.8	V
V <sub>BE(sat)</sub>	Base-emitter saturation voltage	I <sub>C</sub> =-5A; I <sub>B</sub> =-0.5A			-1.8	V
I <sub>CBO</sub>	Collector cut-off current	V <sub>CB</sub> =-40V; I <sub>E</sub> =0			-10	μA
I <sub>EBO</sub>	Emitter cut-off current	V <sub>EB</sub> =-5V; I <sub>C</sub> =0			-100	μA
h <sub>FE</sub>	DC current gain	I <sub>C</sub> =-5A; V <sub>CE</sub> =-2V	40		240	

## Switching times

t <sub>on</sub>	Turn-on time	I <sub>C</sub> =-15A; I <sub>B1</sub> =-I <sub>B2</sub> =-1.5A R <sub>L</sub> =2Ω; P <sub>W</sub> =20μs, Duty≤2%			1.0	μs
t <sub>s</sub>	Storage time				2.0	μs
t <sub>f</sub>	Fall time				1.0	μs

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PACKAGE OUTLINE

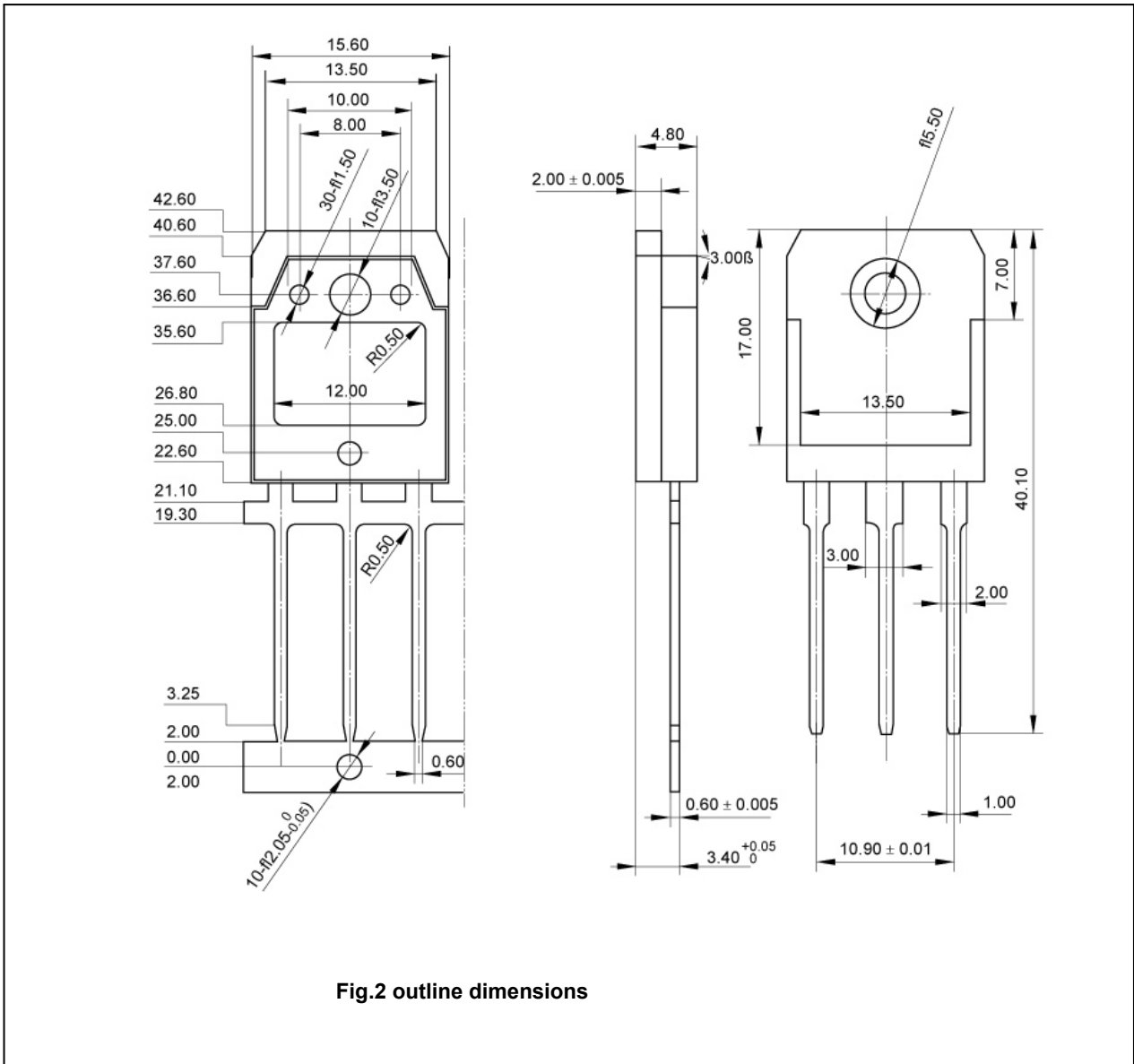


Fig.2 outline dimensions