

**Silicon NPN Power Transistors**

**2SC2578**

**DESCRIPTION**

- With TO-3PN package
- Complementary to 2SA1104
- High Power Dissipation
- High Current Capability

**APPLICATIONS**

- Audio power amplifier
- DC TO DC Converter

**PINNING**

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

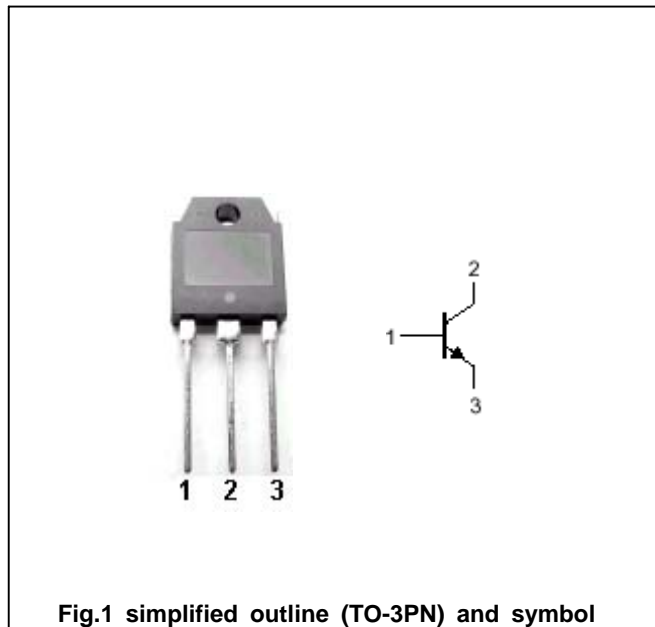


Fig.1 simplified outline (TO-3PN) and symbol

**Absolute maximum ratings(Ta= )**

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
$V_{CBO}$	Collector-base voltage	Open emitter	140	V
$V_{CEO}$	Collector-emitter voltage	Open base	100	V
$V_{EBO}$	Emitter-base voltage	Open collector	6	V
$I_C$	Collector current		7	A
$P_C$	Collector power dissipation	$T_C=25$	70	W
$T_j$	Junction temperature		150	
$T_{stg}$	Storage temperature		-55~150	

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## CHARACTERISTICS

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

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V <sub>(BR)CBO</sub>	Collector-base breakdown voltage	I <sub>C</sub> =5mA; I <sub>E</sub> =0	140			V
V <sub>(BR)CEO</sub>	Collector-emitter breakdown voltage	I <sub>C</sub> =10mA ;R <sub>BE</sub> =	100			V
V <sub>(BR)EBO</sub>	Emitter-base breakdown voltage	I <sub>C</sub> =0 ;I <sub>E</sub> =5mA	6			V
I <sub>CBO</sub>	Collector cut-off current	V <sub>CB</sub> =100V; I <sub>E</sub> =0			0.1	mA
I <sub>EBO</sub>	Emitter cut-off current	V <sub>EB</sub> =4V; I <sub>C</sub> =0			0.1	mA
h <sub>FE1</sub>	DC current gain	I <sub>C</sub> =1A ; V <sub>CE</sub> =5V	55		160	
h <sub>FE2</sub>	DC current gain	I <sub>C</sub> =3A ; V <sub>CE</sub> =5V	50			
V <sub>CE(sat)</sub>	Collector-emitter saturation voltage	I <sub>C</sub> =3A ; I <sub>B</sub> =0.3A			2	V

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PACKAGE OUTLINE

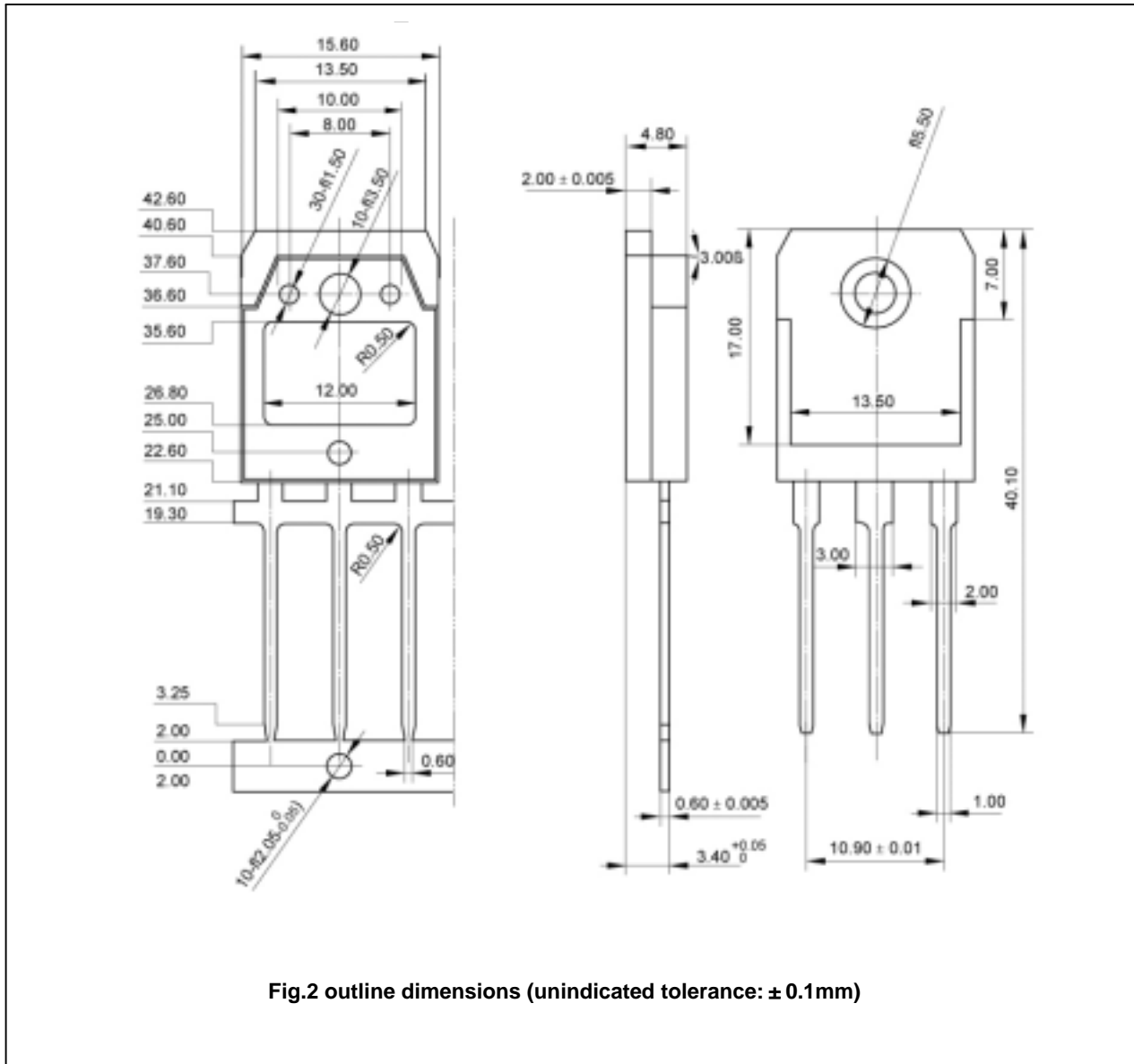


Fig.2 outline dimensions (unindicated tolerance: ± 0.1mm)