

**Silicon NPN Power Transistors**

**2SD1037**

**DESCRIPTION**

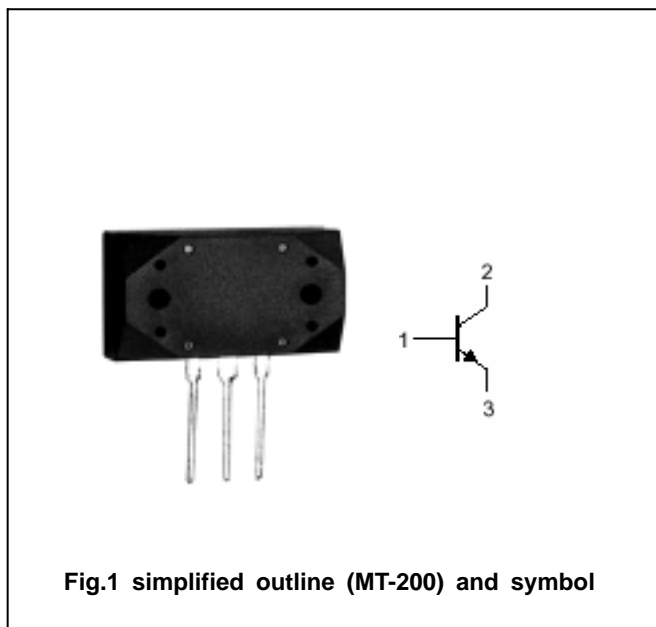
- With MT-200 package
- Excellent safe operating area
- High current capability

**APPLICATIONS**

- For electrical supply ,DC-DC converters and low frequency power amplifier applications

**PINNING(see Fig.2)**

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



**Absolute maximum ratings (Ta=25°C)**

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V <sub>CBO</sub>	Collector-base voltage	Open emitter	150	V
V <sub>CEO</sub>	Collector-emitter voltage	Open base	120	V
V <sub>EBO</sub>	Emitter-base voltage	Open collector	6	V
I <sub>C</sub>	Collector current		30	A
P <sub>C</sub>	Collector power dissipation	T <sub>C</sub> =25	180	W
T <sub>j</sub>	Junction temperature		150	
T <sub>stg</sub>	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)CEO</sub>	Collector-emitter breakdown voltage	I <sub>C</sub> =50mA; I <sub>B</sub> =0	120			V
V <sub>CEsat</sub>	Collector-emitter saturation voltage	I <sub>C</sub> =10 A; I <sub>B</sub> =1 A			0.5	V
V <sub>BEsat</sub>	Base-emitter saturation voltage	I <sub>C</sub> =10 A; I <sub>B</sub> =1 A			1.5	V
I <sub>CBO</sub>	Collector cut-off current	V <sub>CB</sub> =80V; I <sub>E</sub> =0			5	μA
I <sub>EBO</sub>	Emitter cut-off current	V <sub>EB</sub> =6V; I <sub>C</sub> =0			5	μA
h <sub>FE</sub>	DC current gain	I <sub>C</sub> =10A ; V <sub>CE</sub> =4V	20			
f <sub>T</sub>	Transition frequency	I <sub>C</sub> =1A ; V <sub>CE</sub> =4V		1.5		MHz
C <sub>OB</sub>	Output capacitance	I <sub>E</sub> =0; V <sub>CB</sub> =10V; f=1MHz		210		pF

PACKAGE OUTLINE

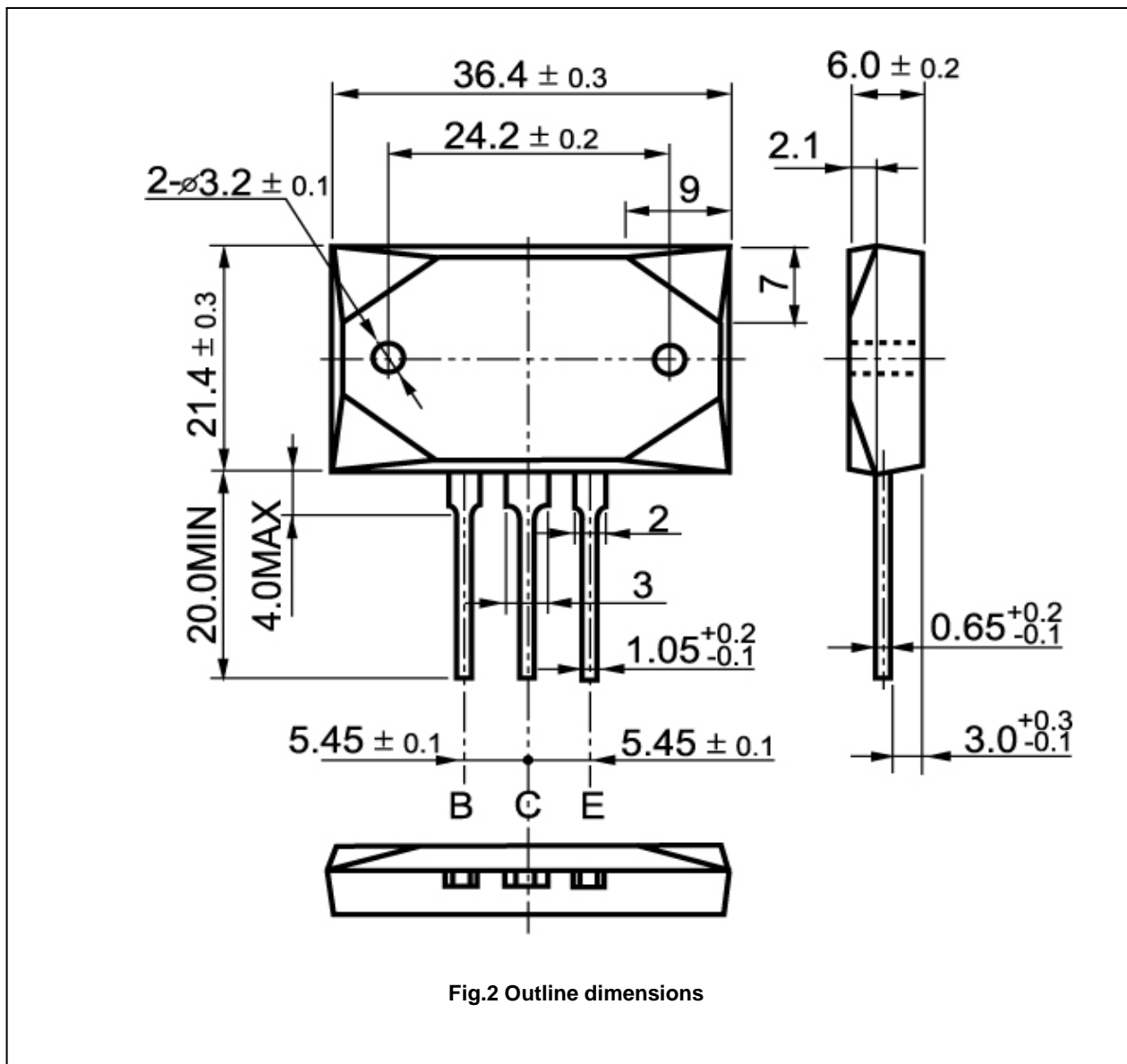


Fig.2 Outline dimensions