

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

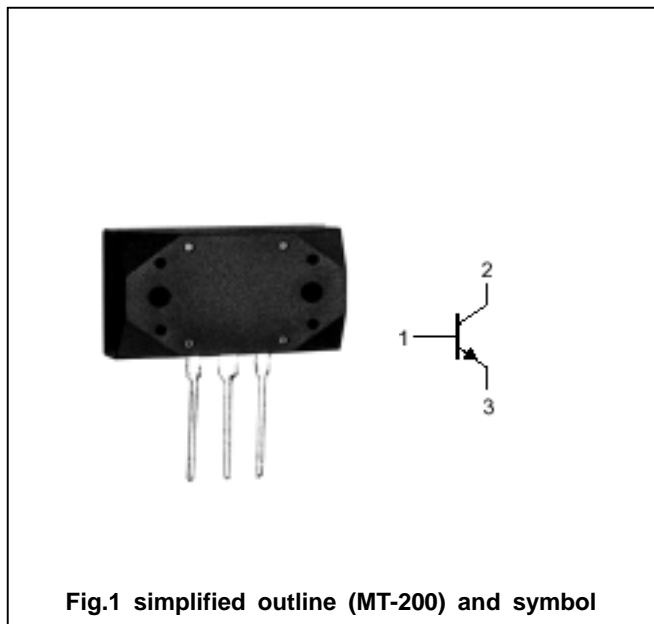


Fig.1 simplified outline (MT-200) and symbol

Absolute maximum ratings (Ta=25°C)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	Open emitter	150	V
V_{CEO}	Collector-emitter voltage	Open base	120	V
V_{EBO}	Emitter-base voltage	Open collector	6	V
I_C	Collector current		30	A
P_C	Collector power dissipation	$T_C=25$	180	W
T_j	Junction temperature		150	
T_{stg}	Storage temperature		-55~150	

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CHARACTERISTICS

T_j=25 unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{(BR)CEO}	Collector-emitter breakdown voltage	I _C =50mA; I _B =0	120			V
V _{CEsat}	Collector-emitter saturation voltage	I _C =10 A; I _B =1 A			0.5	V
V _{BEsat}	Base-emitter saturation voltage	I _C =10 A; I _B =1 A			1.0	V
I _{CBO}	Collector cut-off current	V _{CB} =80V; I _E =0			5	μ A
I _{EBO}	Emitter cut-off current	V _{EB} =6V; I _C =0			5	μ A
h _{FE}	DC current gain	I _C =10A ; V _{CE} =4V	20			
f _T	Transition frequency	I _C =1A ; V _{CE} =4V		1.5		MHz
C _{OB}	Output capacitance	I _E =0; V _{CB} =10V; f=1MHz		210		pF

PACKAGE OUTLINE

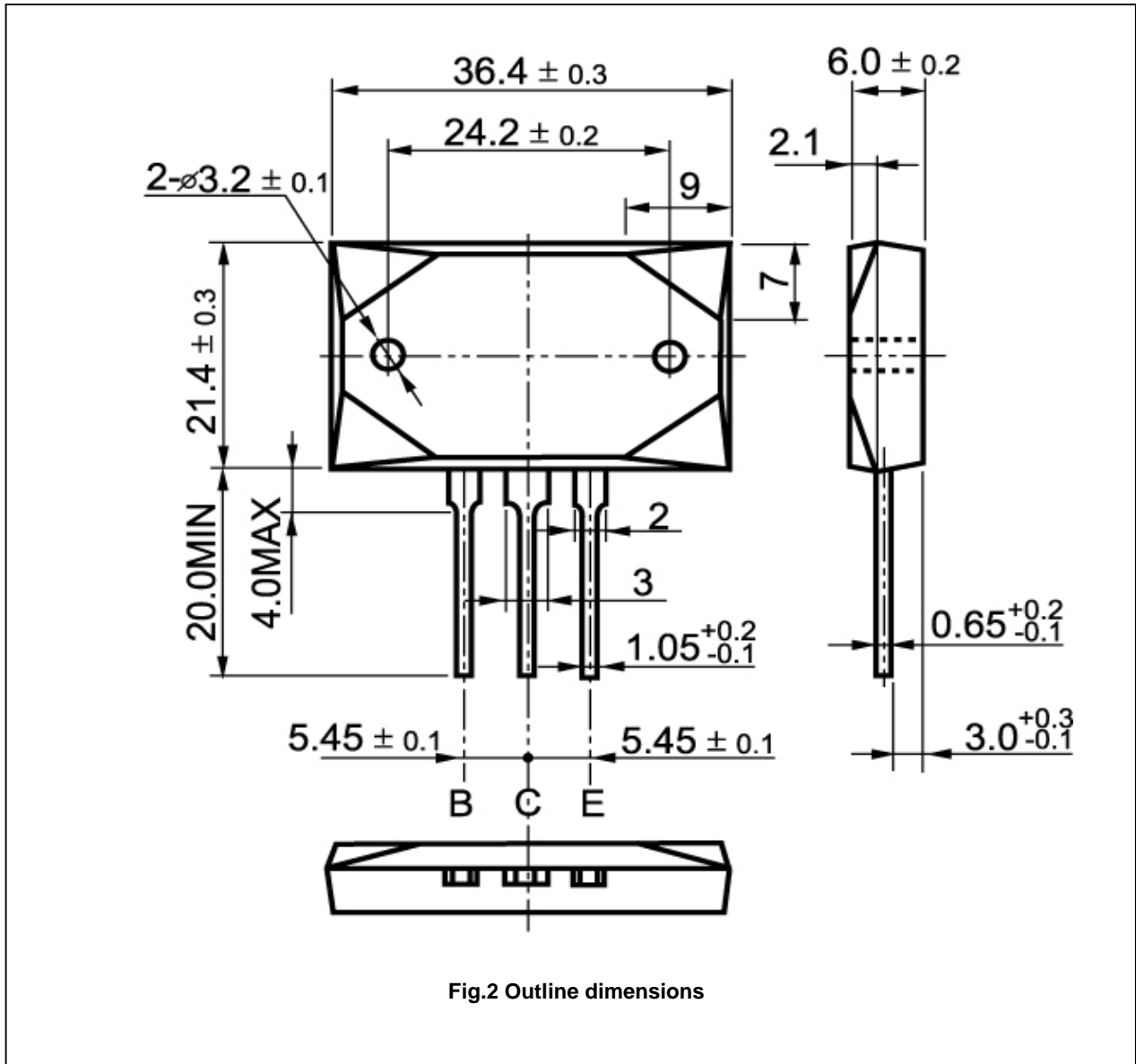


Fig.2 Outline dimensions