

Silicon NPN Power Transistors

2SD845

DESCRIPTION

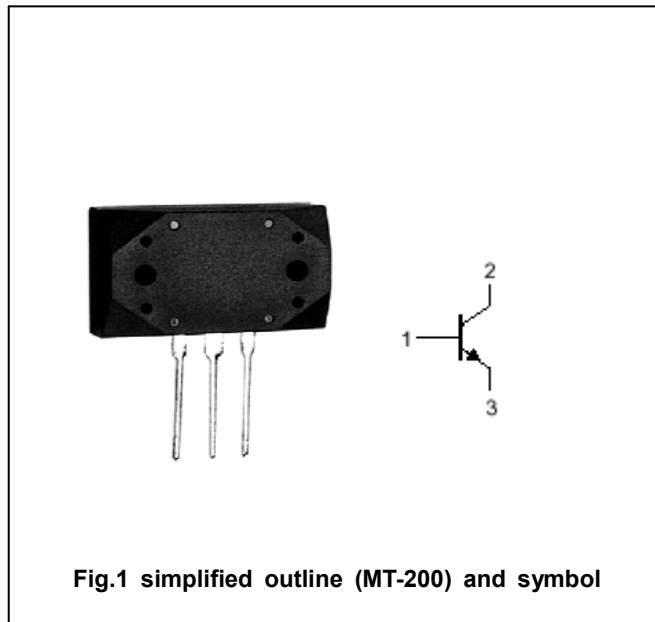
- With MT-200 package
- Complement to type 2SB755
- High transition frequency
- High breakdown voltage : $V_{CEO}=150V(\text{min})$

APPLICATIONS

- For power amplifier applications

PINNING(see Fig.2)

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

Absolute maximum ratings ($T_a=25^\circ\text{C}$)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	Open emitter	150	V
V_{CEO}	Collector-emitter voltage	Open base	150	V
V_{EBO}	Emitter-base voltage	Open collector	5	V
I_C	Collector current		12	A
I_B	Base current		1.2	A
P_C	Collector power dissipation	$T_C=25^\circ\text{C}$	120	W
T_j	Junction temperature		150	$^\circ\text{C}$
T_{stg}	Storage temperature		-55~150	$^\circ\text{C}$

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CHARACTERISTICS

T_j=25 °C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{(BR)CEO}	Collector-emitter breakdown voltage	I _C =0.1A; I _B =0	150			V
V _{(BR)EBO}	Emitter-base breakdown voltage	I _E =10mA; I _C =0	5			V
V _{CEsat}	Collector-emitter saturation voltage	I _C =5 A; I _B =0.5 A			2.0	V
V _{BE}	Base-emitter on voltage	I _C =5A ; V _{CE} =5V			1.5	V
I _{CBO}	Collector cut-off current	V _{CB} =150V; I _E =0			-50	μA
I _{EBO}	Emitter cut-off current	V _{EB} =5V; I _C =0			-50	μA
h _{FE}	DC current gain	I _C =1A ; V _{CE} =5V	55		160	
f _T	Transition frequency	I _C =1A ; V _{CE} =10V		20		MHz

◆ h_{FE} classifications

R	O
55-110	80-160

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PACKAGE OUTLINE

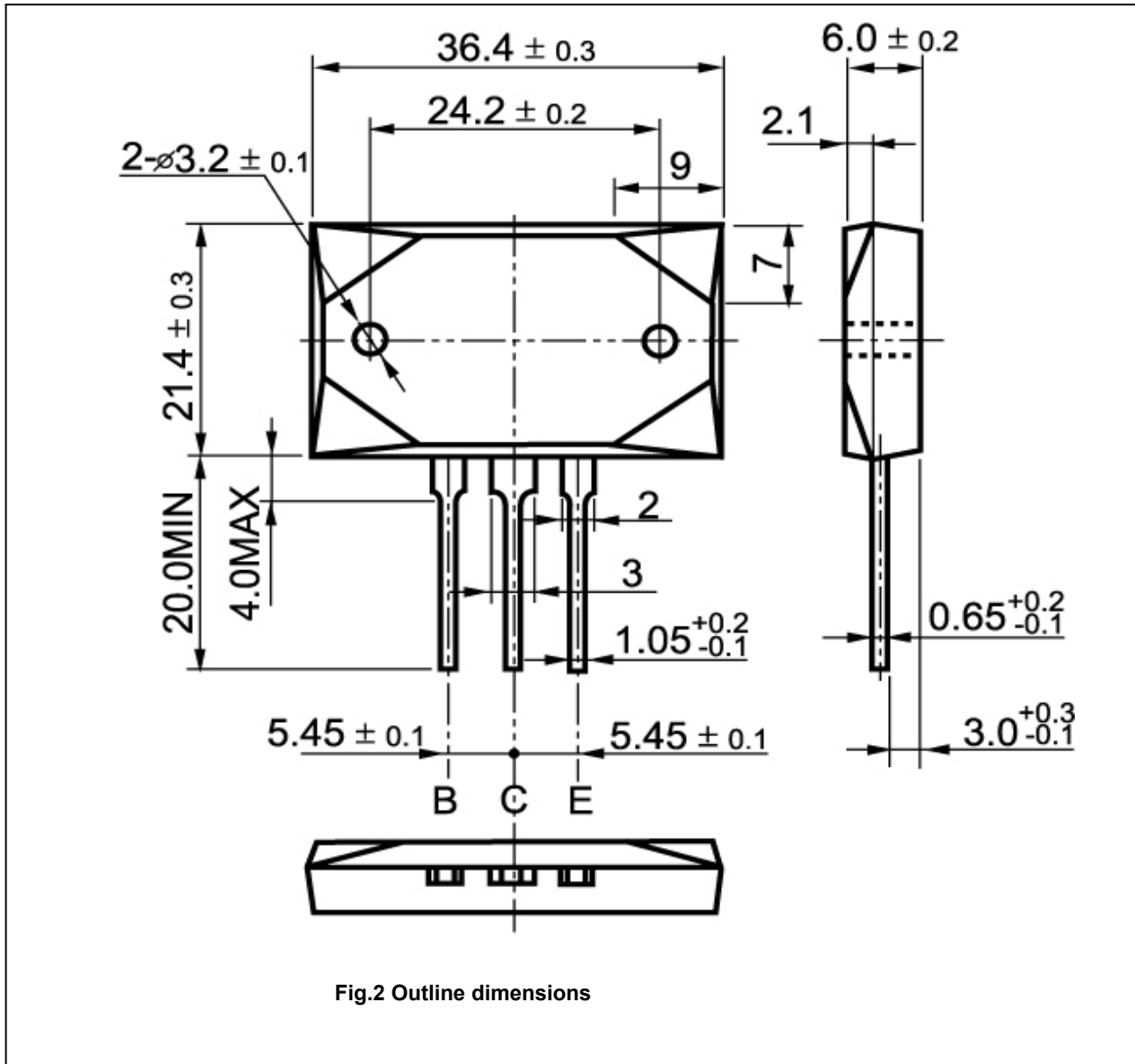


Fig.2 Outline dimensions