

Silicon NPN Power Transistors

2SC2838

DESCRIPTION

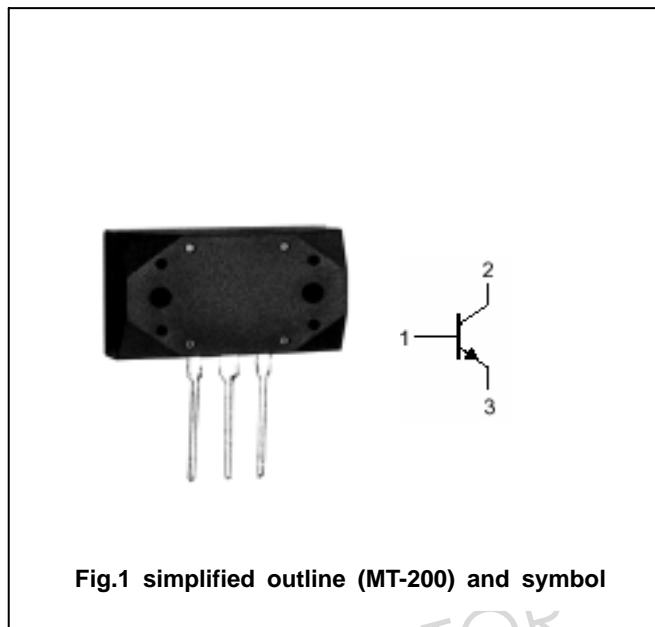
- With MT-200 package
- Fast switching speed
- Wide area of safe operation

APPLICATIONS

- For high frequency power amplifiers, audio power amplifiers, switching regulators and DC-DC converters application

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_{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
P_C	Collector power dissipation	$T_C=25$	120	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	$I_C=10mA; I_B=0$	150			V
$V_{(BR)CBO}$	Collector-base breakdown voltage	$I_C=1mA; I_E=0$	150			V
$V_{(BR)EBO}$	Emitter-base breakdown voltage	$I_E=1mA; I_C=0$	5			V
V_{CEsat}	Collector-emitter saturation voltage	$I_C=5A; I_B=0.5A$			1.8	V
I_{CBO}	Collector cut-off current	$V_{CB}=140V; I_E=0$			50	μA
I_{EBO}	Emitter cut-off current	$V_{EB}=5V; I_C=0$			50	μA
h_{FE}	DC current gain	$I_C=3A; V_{CE}=4V$	60			
f_T	Transition frequency	$I_C=1A; V_{CE}=10V$		70		MHz

PACKAGE OUTLINE

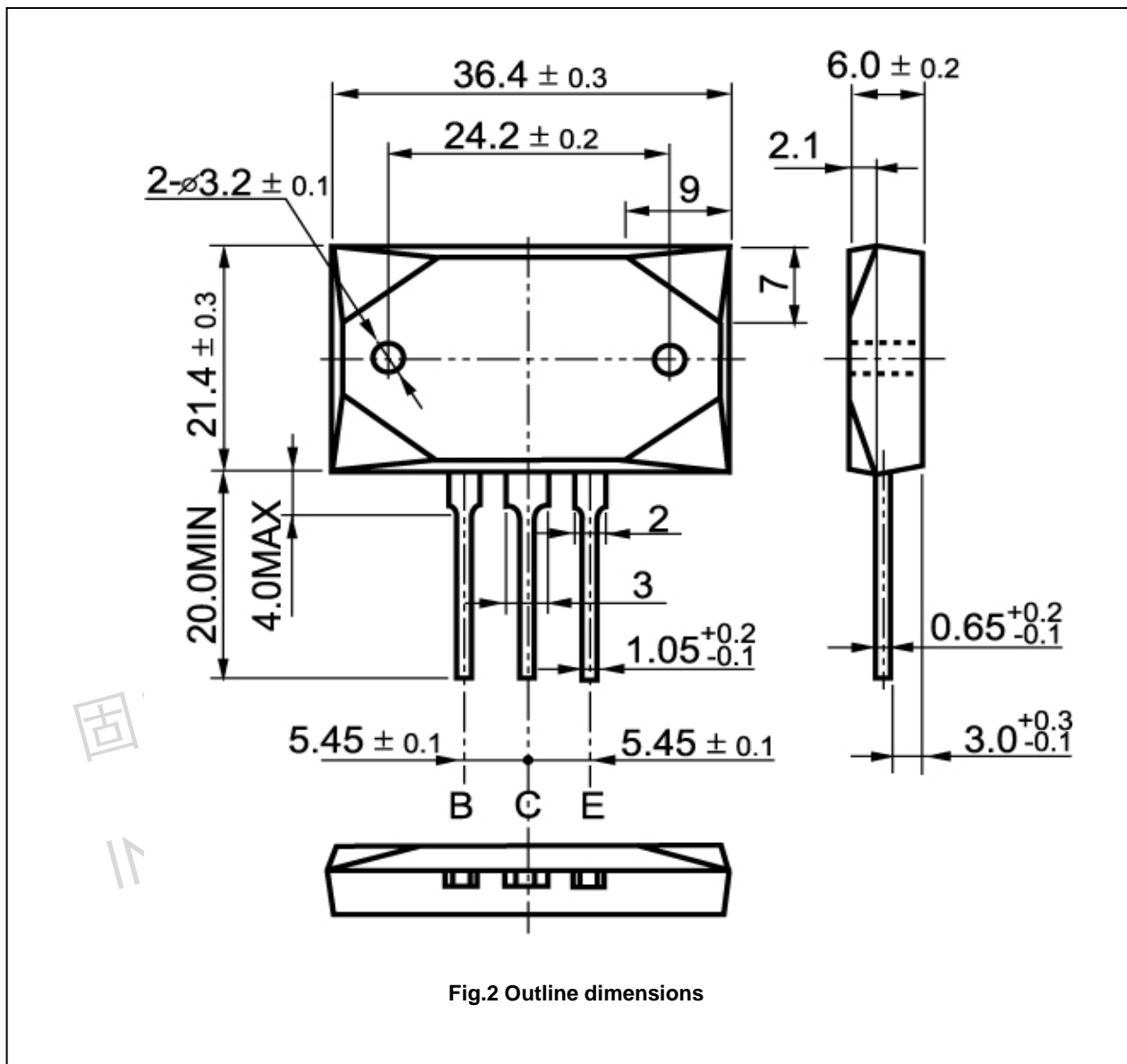


Fig.2 Outline dimensions