

**Silicon NPN Power Transistors**

**2SC2565**

**DESCRIPTION**

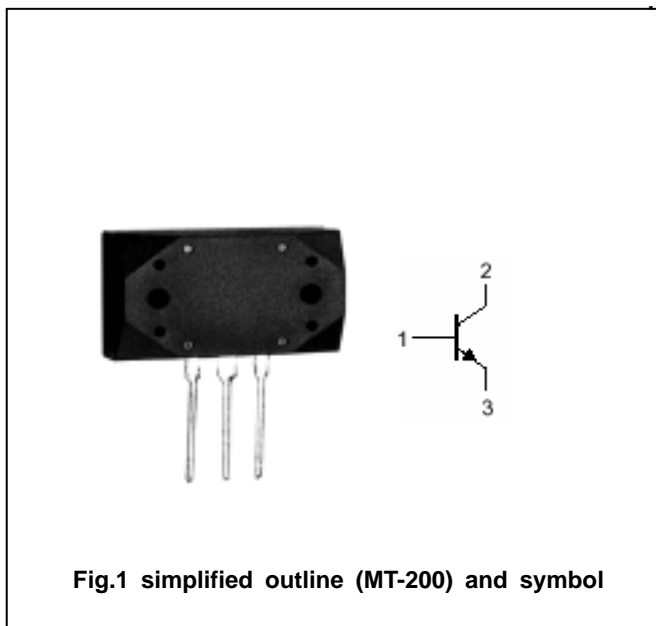
- With MT-200 package
- Complement to type 2SA1095
- High transition frequency

**APPLICATIONS**

- For 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	160	V
$V_{CEO}$	Collector-emitter voltage	Open base	160	V
$V_{EBO}$	Emitter-base voltage	Open collector	5	V
$I_C$	Collector current		15	A
$I_B$	Base current		1.5	A
$P_C$	Collector power dissipation	$T_C=25$	150	W
$T_j$	Junction temperature		150	
$T_{stg}$	Storage temperature		-55~150	

## Silicon NPN Power Transistors

## 2SC2565

## 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> =0.1A; I <sub>B</sub> =0	160			V
V <sub>(BR)EBO</sub>	Emitter-base breakdown voltage	I <sub>E</sub> =10mA; I <sub>C</sub> =0	5			V
V <sub>CEsat</sub>	Collector-emitter saturation voltage	I <sub>C</sub> =5 A; I <sub>B</sub> =0.5 A			2.0	V
V <sub>BE</sub>	Base-emitter on voltage	I <sub>C</sub> =5A ; V <sub>CE</sub> =5V			2.0	V
I <sub>CBO</sub>	Collector cut-off current	V <sub>CB</sub> =160V; I <sub>E</sub> =0			50	μ A
I <sub>EBO</sub>	Emitter cut-off current	V <sub>EB</sub> =5V; I <sub>C</sub> =0			50	μ A
h <sub>FE-1</sub>	DC current gain	I <sub>C</sub> =1A ; V <sub>CE</sub> =5V	55		240	
h <sub>FE-2</sub>	DC current gain	I <sub>C</sub> =5A ; V <sub>CE</sub> =5V	40			
f <sub>T</sub>	Transition frequency	I <sub>C</sub> =1A ; V <sub>CE</sub> =10V		80		MHz
C <sub>OB</sub>	Output capacitance	I <sub>E</sub> =0; V <sub>CB</sub> =10V;f=1MHz		200		pF

◆ h<sub>FE-1</sub> classifications

R	O	Y
55-110	80-160	120-240

Silicon NPN Power Transistors

2SC2565

PACKAGE OUTLINE

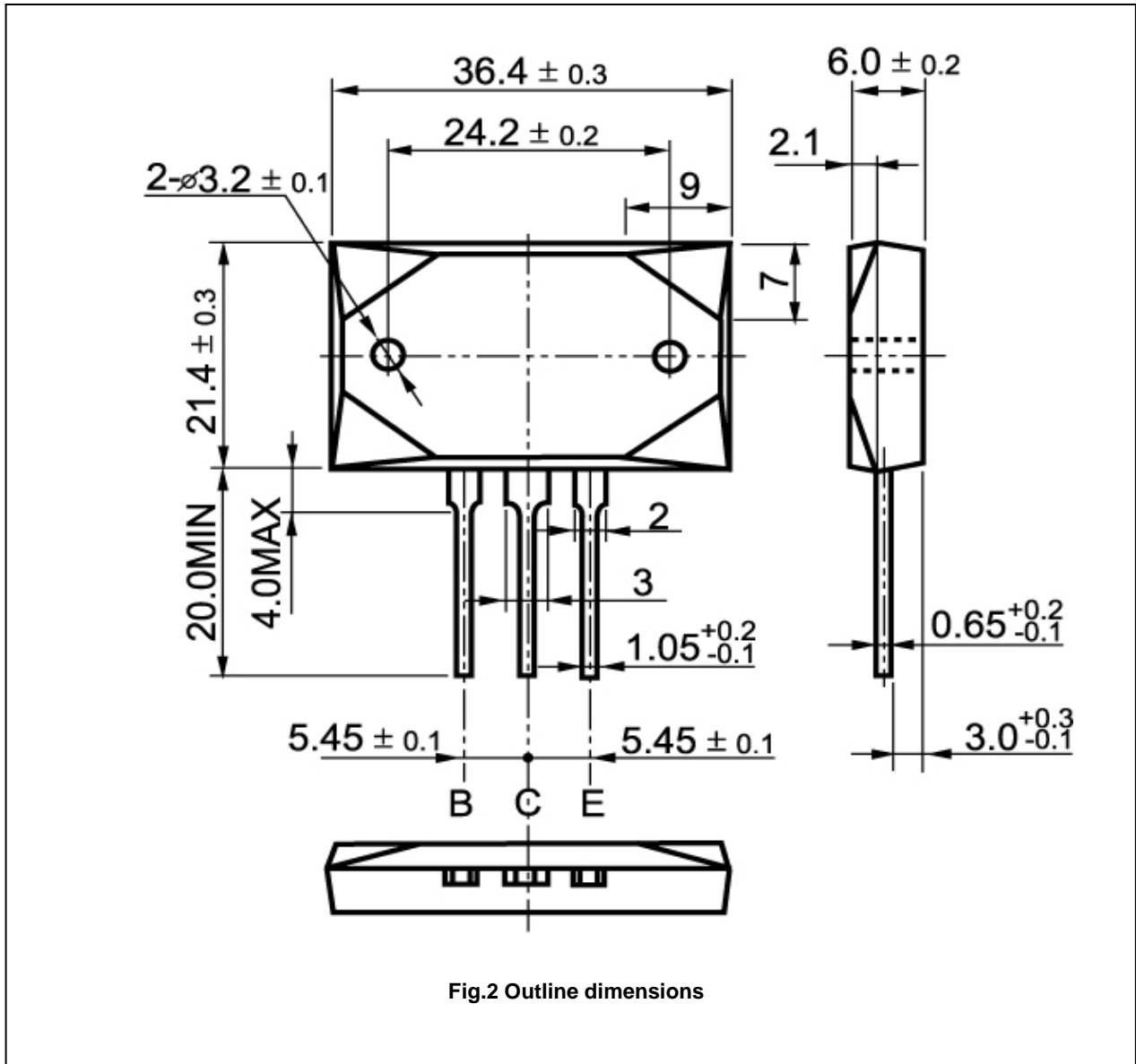


Fig.2 Outline dimensions