

## Silicon PNP Power Transistors

2SA1170

## DESCRIPTION

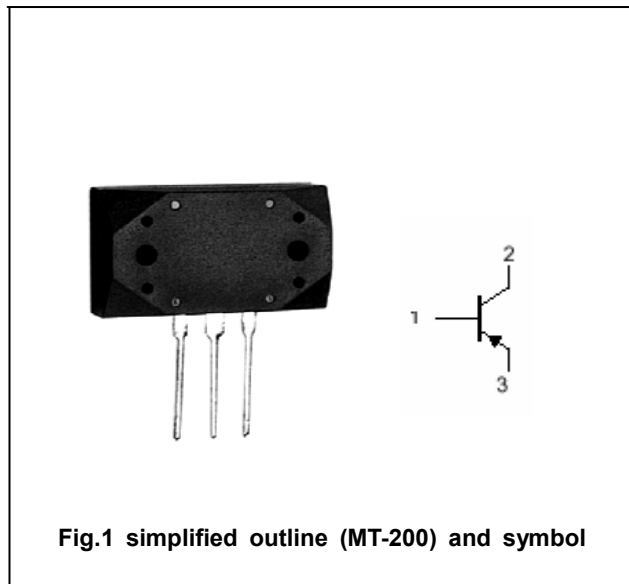
- With MT-200 package
- High power dissipation
- Complement to type 2SC2774

## APPLICATIONS

- Audio and general purpose applications

## PINNING (see Fig.2)

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

Absolute maximum ratings( $T_a=25^\circ$ )

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
$V_{CBO}$	Collector-base voltage	Open emitter	-200	V
$V_{CEO}$	Collector-emitter voltage	Open base	-200	V
$V_{EBO}$	Emitter-base voltage	Open collector	-6	V
$I_C$	Collector current		-17	A
$I_B$	Base current		-5	A
$P_C$	Collector power dissipation	$T_C=25^\circ$	200	W
$T_j$	Junction temperature		150	$^\circ$
$T_{stg}$	Storage temperature		-55~150	$^\circ$

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## CHARACTERISTICS

T<sub>j</sub>=25 °C 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	-200			V
V <sub>(BR)EBO</sub>	Emitter-base breakdown voltage	I <sub>E</sub> =-1mA ; I <sub>C</sub> =0	-6			V
V <sub>CEsat</sub>	Collector-emitter saturation voltage	I <sub>C</sub> =-10A ; I <sub>B</sub> =-1A			-2.5	V
I <sub>CBO</sub>	Collector cut-off current	V <sub>CB</sub> =-200V ; I <sub>E</sub> =0			-100	μA
I <sub>EBO</sub>	Emitter cut-off current	V <sub>EB</sub> =-6V ; I <sub>C</sub> =0			-100	μA
h <sub>FE</sub>	DC current gain	I <sub>C</sub> =-8A ; V <sub>CE</sub> =-4V	20			
f <sub>T</sub>	Transition frequency	I <sub>C</sub> =-1A ; V <sub>CE</sub> =-12V		20		MHz

## Switching times

t <sub>r</sub>	Rise time	I <sub>C</sub> =-10A ; I <sub>B1</sub> =- I <sub>B2</sub> =-1A R <sub>L</sub> =4Ω ; V <sub>CC</sub> =-40V		0.6		μs
t <sub>stg</sub>	Storage time			0.9		μs
t <sub>f</sub>	Fall time			0.2		μs

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PACKAGE OUTLINE

