

## Silicon PNP Power Transistors

MJ4502

## DESCRIPTION

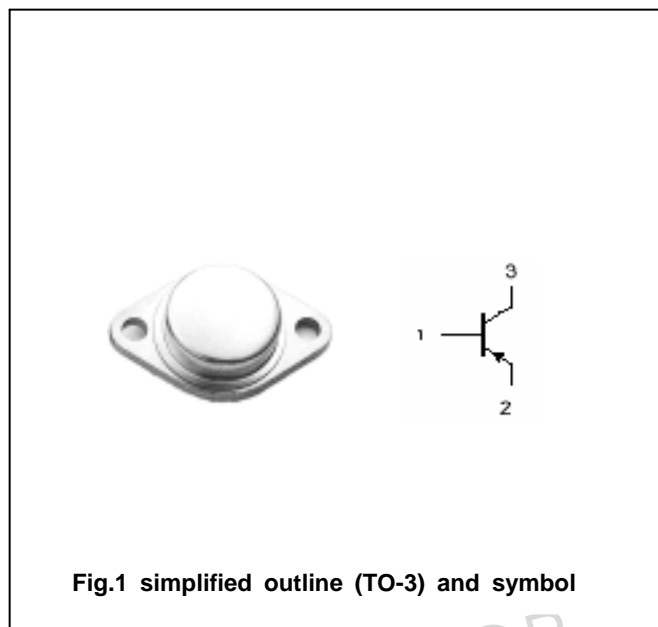
- With TO-3 package
- Complement to type MJ802
- Excellent safe operating area

## APPLICATIONS

- For use as an output device in complementary audio amplifiers to 100-Watts music power per channel

## PINNING(see Fig.2)

PIN	DESCRIPTION
1	Base
2	Emitter
3	Collector

Absolute maximum ratings( $T_a =$ )

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
$V_{CBO}$	Collector-base voltage	Open emitter	-100	V
$V_{CEO}$	Collector-emitter voltage	Open base	-90	V
$V_{EBO}$	Emitter-base voltage	Open collector	-4	V
$I_C$	Collector current		-30	A
$I_B$	Base current		-7.5	A
$P_C$	Collector power dissipation	$T_C=25$	200	W
$T_j$	Junction temperature		200	
$T_{stg}$	Storage temperature		-65~200	

## THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j-c}$	Thermal resistance junction to case	0.875	/W

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## CHARACTERISTICS

T<sub>j</sub>=25 unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V <sub>CEO(SUS)</sub>	Collector-emitter sustaining voltage	I <sub>C</sub> =-0.2A ; I <sub>B</sub> =0	-90			V
V <sub>CEsat</sub>	Collector-emitter saturation voltage	I <sub>C</sub> =-7.5A; I <sub>B</sub> =-0.75A			-0.8	V
V <sub>BEsat</sub>	Base-emitter saturation voltage	I <sub>C</sub> =-7.5A; I <sub>B</sub> =-0.75A			-1.3	V
V <sub>BE</sub>	Base-emitter on voltage	I <sub>C</sub> =-7.5A ; V <sub>CE</sub> =-2V			-1.3	V
I <sub>CBO</sub>	Collector cut-off current	V <sub>CB</sub> =-100V; I <sub>E</sub> =0 T <sub>C</sub> =150			-1.0 -5.0	mA
I <sub>EBO</sub>	Emitter cut-off current	V <sub>EB</sub> =-4V; I <sub>C</sub> =0			-1.0	mA
h <sub>FE</sub>	DC current gain	I <sub>C</sub> =-7.5A ; V <sub>CE</sub> =-2V	25		100	
f <sub>T</sub>	Transition frequency	I <sub>C</sub> =-1A ; V <sub>CE</sub> =-10V; f=1.0MHz	2.0			MHz

PACKAGE OUTLINE

