

## Silicon PNP Power Transistors

2SA753

## DESCRIPTION

- With TO-3 package
- Wide area of safe operation
- Complement to type 2SC1343

## APPLICATIONS

- For 100W audio amplifier power output applications

## PINNING(see Fig.2)

PIN	DESCRIPTION
1	Base
2	Emitter
3	Collector

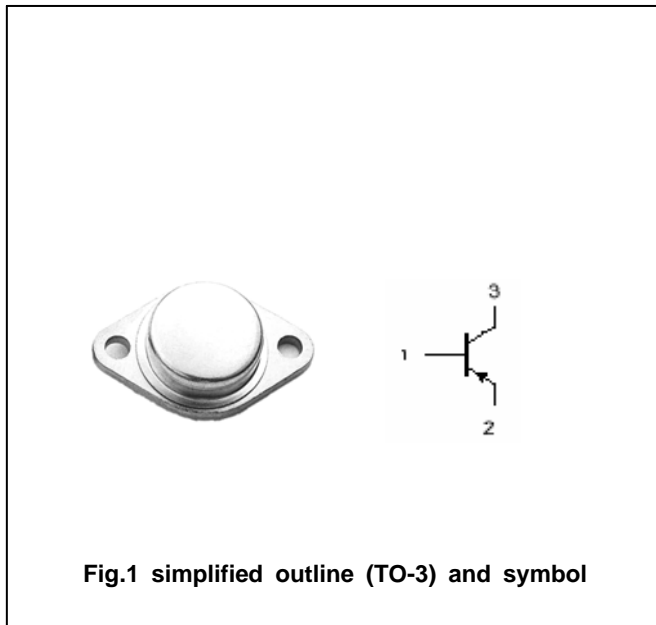


Fig.1 simplified outline (TO-3) and symbol

## Absolute maximum ratings(Ta=°C)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
$V_{CBO}$	Collector-base voltage	Open emitter	-140	V
$V_{CEO}$	Collector-emitter voltage	Open base	-110	V
$V_{EBO}$	Emitter-base voltage	Open collector	-5	V
$I_C$	Collector current		-10	A
$I_{CM}$	Collector current-peak		-12	A
$P_C$	Collector power dissipation	$T_C=25^\circ\text{C}$	100	W
$T_j$	Junction temperature		150	°C
$T_{stg}$	Storage temperature		-55~150	°C

## Silicon PNP Power Transistors

## 2SA753

## 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 ; R <sub>BE</sub> =∞	-110			V
V <sub>(BR)CBO</sub>	Collector-base breakdown voltage	I <sub>C</sub> =-5mA ; I <sub>E</sub> =0	-140			V
V <sub>(BR)EBO</sub>	Emitter-base breakdown voltage	I <sub>E</sub> =-5mA ; I <sub>C</sub> =0	-5			V
V <sub>CEsat</sub>	Collector-emitter saturation voltage	I <sub>C</sub> =-5A ; I <sub>B</sub> =-1A			-1.5	V
V <sub>BE</sub>	Base-emitter on voltage	I <sub>C</sub> =-1A ; V <sub>CE</sub> =-5V			-1.5	V
I <sub>CBO</sub>	Collector cut-off current	V <sub>CB</sub> =-30V ; I <sub>E</sub> =0			-1	mA
h <sub>FE-1</sub>	DC current gain	I <sub>C</sub> =-1A ; V <sub>CE</sub> =-5V	30		200	
h <sub>FE-2</sub>	DC current gain	I <sub>C</sub> =-10A ; V <sub>CE</sub> =-5V	15			
f <sub>T</sub>	Transition frequency	I <sub>C</sub> =-1A ; V <sub>CE</sub> =-5V		20		MHz

◆ h<sub>FE-1</sub> Classifications

A	B	C
30-60	50-120	100-200

Silicon PNP Power Transistors

2SA753

PACKAGE OUTLINE

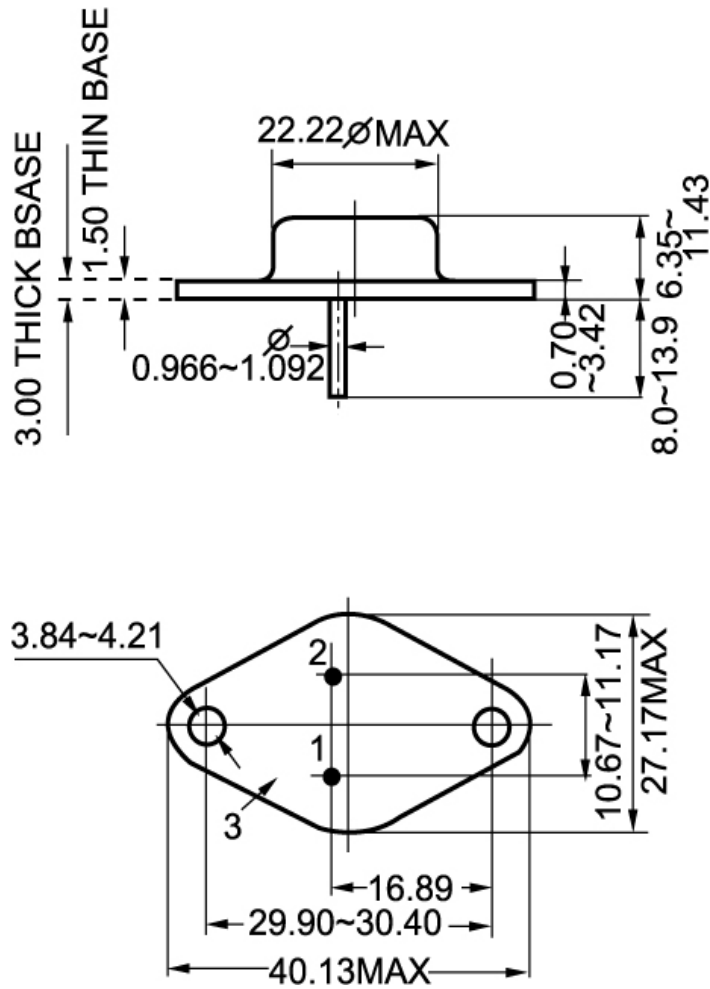


Fig.2 outline dimensions (unindicated tolerance:  $\pm 0.1$ mm)