

Silicon PNP Power Transistors

2SB1254

DESCRIPTION

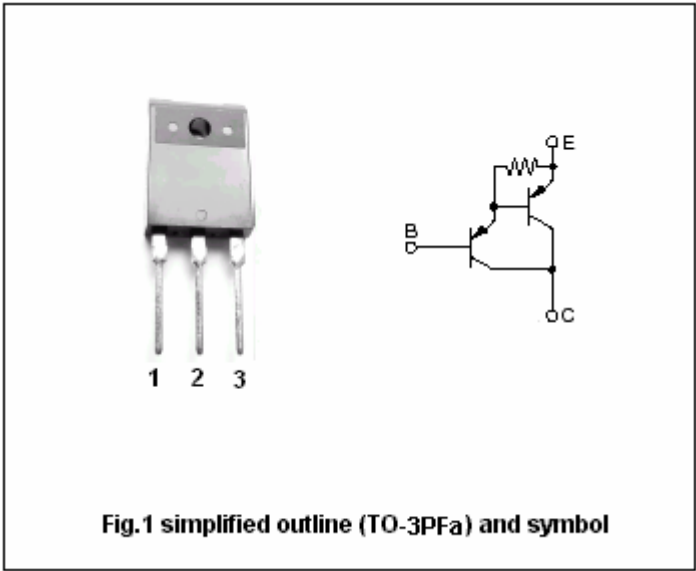
- With TO-3PFa package
- Optimum for 60W HiFi output
- High foward current transfer ratio
- Low collector saturation voltage
- Complement to type 2SD1894

APPLICATIONS

- Power amplification

PINNING

PIN	DESCRIPTION
1	Base
2	Collector
3	Emitter



Absolute maximum ratings(Ta=25)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V _{CBO}	Collector-base voltage	Open emitter	-160	V
V _{CEO}	Collector-emitter voltage	Open base	-140	V
V _{EBO}	Emitter-base voltage	Open collector	-5	V
I _C	Collector current		-7	A
I _{CP}	Collector current-peak		-12	A
P _C	Collector power dissipation	T _C =25	70	W
		T _a =25	3	
T _j	Junction temperature		150	
T _{stg}	Storage temperature		-55~150	

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CHARACTERISTICS

Tj=25 unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V_{CEO}	Collector-emitter voltage	$I_C = -30\text{mA}$; $I_B = 0$	-140			V
V_{CEsat}	Collector-emitter saturation voltage	$I_C = -6\text{A}$; $I_B = -6\text{mA}$			-2.5	V
V_{BEsat}	Base-emitter saturation voltage	$I_C = -6\text{A}$; $I_B = -6\text{mA}$			-3.0	V
I_{CBO}	Collector cut-off current	$V_{CB} = -160\text{V}$; $I_E = 0$			-100	μA
I_{CEO}	Collector cut-off current	$V_{CE} = -140\text{V}$; $I_B = 0$			-100	μA
I_{EBO}	Emitter cut-off current	$V_{EB} = -5\text{V}$; $I_C = 0$			-100	μA
h_{FE-1}	DC current gain	$I_C = -1\text{A}$; $V_{CE} = -5\text{V}$	2000			
h_{FE-2}	DC current gain	$I_C = -6\text{A}$; $V_{CE} = -5\text{V}$	5000		30000	
f_T	Transition frequency	$I_C = -0.5\text{A}$; $V_{CE} = -10\text{V}$; $f = 1\text{MHz}$		20		MHz

Switching times

t_{on}	Turn-on time	$I_C = -6\text{A}$; $V_{CC} = 50\text{V}$ $I_{B1} = -I_{B2} = -6\text{mA}$		1.0		μs
t_s	Storage time			1.5		μs
t_f	Fall time			1.2		μs

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Technical drawing of a mechanical part, likely a valve or actuator, showing three views: front, side, and bottom. The drawing includes numerous dimensions in millimeters and degrees.

Front View Dimensions:

- Overall width: 15.00
- Top flange width: 9.00
- Top flange thickness: 5.80
- Top flange inner width: 3.10
- Top flange outer width: 5.15
- Top flange inner radius: 45.000°
- Top flange outer radius: 4.00
- Top flange inner hole diameter: $\phi 3.200$
- Top flange outer hole diameter: $3 \times \phi 1.500$ (光面)
- Top flange inner hole diameter: 8.000
- Top flange outer hole diameter: 13.00
- Top flange inner hole diameter: 13.30
- Top flange outer hole diameter: 15.20
- Top flange inner hole diameter: 19.20
- Top flange outer hole diameter: 31.15
- Top flange outer hole diameter: 31.90
- Top flange inner hole diameter: 45.000°
- Top flange outer hole diameter: 15.000°
- Top flange inner hole diameter: 2.000
- Top flange outer hole diameter: 1.000
- Top flange inner hole diameter: 10.900
- Top flange outer hole diameter: 5.000°
- Top flange inner hole diameter: 0.800
- Top flange outer hole diameter: 2.014
- Top flange inner hole diameter: 1.100
- Top flange outer hole diameter: 4.500
- Top flange inner hole diameter: 5.000°

Side View Dimensions:

- Overall height: 5.00
- Top flange height: 3.30
- Top flange inner height: 2.00
- Top flange outer height: 5.15
- Top flange inner height: 4.00
- Top flange outer height: 3.000°
- Top flange inner height: 3.000°
- Top flange outer height: 0.600
- Top flange inner height: 2.000
- Top flange outer height: 1.100
- Top flange inner height: 4.500
- Top flange outer height: 5.000°

Bottom View Dimensions:

- Overall width: 15.00
- Top flange width: 9.00
- Top flange thickness: 5.80
- Top flange inner width: 3.10
- Top flange outer width: 5.15
- Top flange inner radius: 45.000°
- Top flange outer radius: 4.00
- Top flange inner hole diameter: $\phi 3.200$
- Top flange outer hole diameter: $3 \times \phi 1.500$ (光面)
- Top flange inner hole diameter: 8.000
- Top flange outer hole diameter: 13.00
- Top flange inner hole diameter: 13.30
- Top flange outer hole diameter: 15.20
- Top flange inner hole diameter: 19.20
- Top flange outer hole diameter: 31.15
- Top flange outer hole diameter: 31.90
- Top flange inner hole diameter: 45.000°
- Top flange outer hole diameter: 15.000°
- Top flange inner hole diameter: 2.000
- Top flange outer hole diameter: 1.000
- Top flange inner hole diameter: 10.900
- Top flange outer hole diameter: 5.000°
- Top flange inner hole diameter: 0.800
- Top flange outer hole diameter: 2.014
- Top flange inner hole diameter: 1.100
- Top flange outer hole diameter: 4.500
- Top flange inner hole diameter: 5.000°

Fig.2 Outline dimensions (unindicated tolerance: $\pm 0.30\text{mm}$)