

Silicon PNP Power Transistors

2SB1254

DESCRIPTION

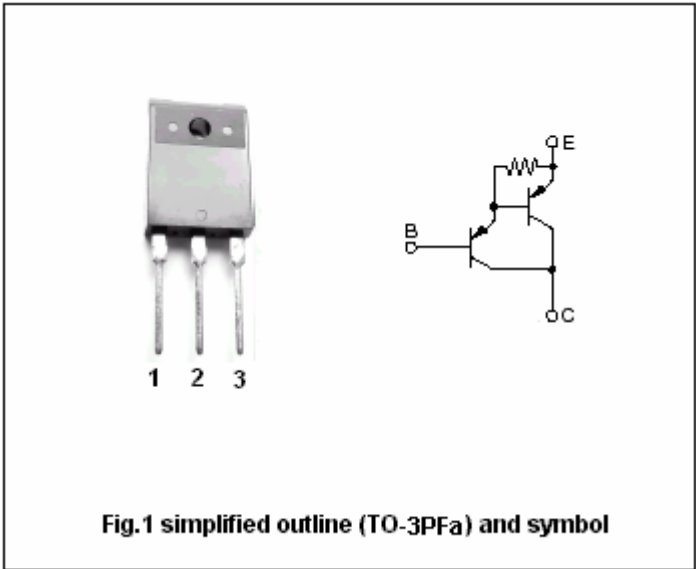
- With TO-3PFa package
- Optimum for 60W HiFi output
- High foward current transfer ratio
- Low collector saturation voltage
- Complement to type 2SD1894

APPLICATIONS

- Power amplification

PINNING

PIN	DESCRIPTION
1	Base
2	Collector
3	Emitter



Absolute maximum ratings(Ta=25°C)

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	$T_C=25^{\circ}C$	70	W
		$T_a=25^{\circ}C$	3	
T_j	Junction temperature		150	$^{\circ}C$
T_{stg}	Storage temperature		-55~150	$^{\circ}C$

Silicon PNP Power Transistors

2SB1254

CHARACTERISTICS

Tj=25°C unless otherwise specified

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

Switching times

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

2SB1254

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