

## Silicon PNP Power Transistors

## 2SB754

## DESCRIPTION

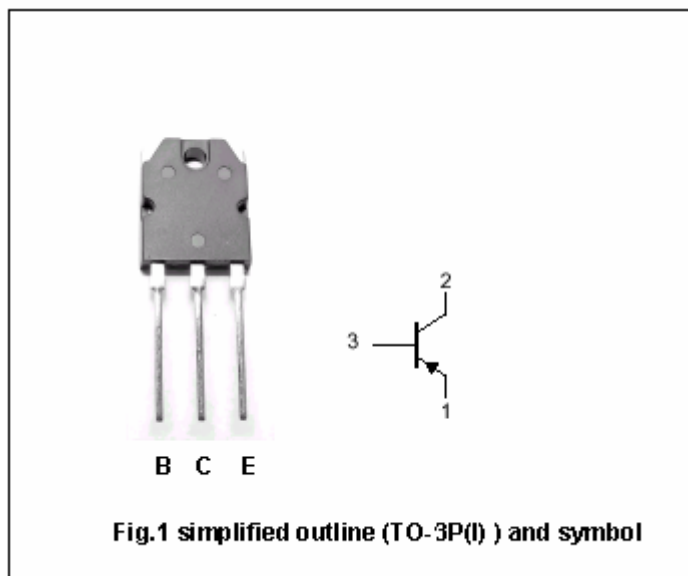
- With TO-3P(I) package
- Complement to type 2SD844
- High collector current : $I_C=-7A$
- Low collector saturation voltage
- High power dissipation

## APPLICATIONS

- High current switching applications
- Power amplifier applications

## PINNING

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

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

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
$V_{CBO}$	Collector-base voltage	Open emitter	-50	V
$V_{CEO}$	Collector-emitter voltage	Open base	-50	V
$V_{EBO}$	Emitter-base voltage	Open collector	-5	V
$I_C$	Collector current		-7	A
$I_E$	Emitter current		7	A
$P_C$	Collector power dissipation	$T_a=25^\circ$	2.5	W
		$T_C=25^\circ$	60	
$T_j$	Junction temperature		150	$^\circ$
$T_{stg}$	Storage temperature		-55~150	$^\circ$

**Silicon PNP Power Transistors****2SB754****CHARACTERISTICS****T<sub>j</sub>=25℃ 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	-50			V
V <sub>(BR)EBO</sub>	Emitter-base breakdown voltage	I <sub>E</sub> =-10mA; I <sub>C</sub> =0	-5			V
V <sub>CEsat</sub>	Collector-emitter saturation voltage	I <sub>C</sub> =-4.0A; I <sub>B</sub> =-0.4A		-0.2	-0.4	V
V <sub>BE</sub>	Base-emitter voltage	I <sub>C</sub> =-4A ; V <sub>CE</sub> =-1V		-0.9	-1.2	V
I <sub>CBO</sub>	Collector cut-off current	V <sub>CB</sub> =-50V; I <sub>E</sub> =0			-10	μA
I <sub>EBO</sub>	Emitter cut-off current	V <sub>EB</sub> =-5V; I <sub>C</sub> =0			-10	μA
h <sub>FE-1</sub>	DC current gain	I <sub>C</sub> =-1A ; V <sub>CE</sub> =-1V	70		240	
h <sub>FE-2</sub>	DC current gain	I <sub>C</sub> =-4A ; V <sub>CE</sub> =-1V	30			
f <sub>T</sub>	Transition frequency	I <sub>C</sub> =-1A ; V <sub>CE</sub> =-5V		10		MHz
C <sub>OB</sub>	Collector output capacitance	I <sub>E</sub> =0;f=1MHz ; V <sub>CB</sub> =-10V		300		pF

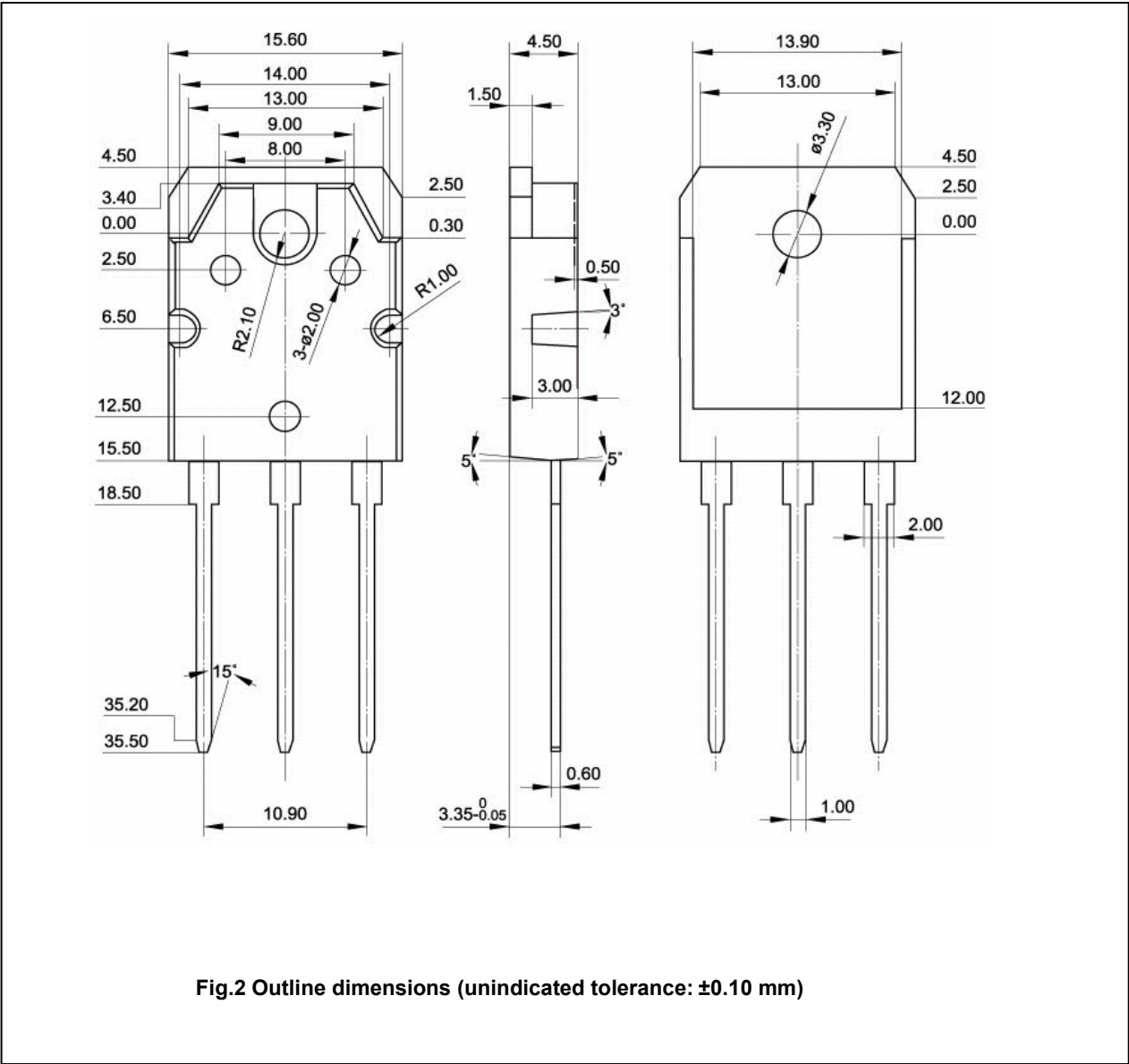
◆ **h<sub>FE-1</sub> Classifications**

O	Y
70-140	120-240

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PACKAGE OUTLINE



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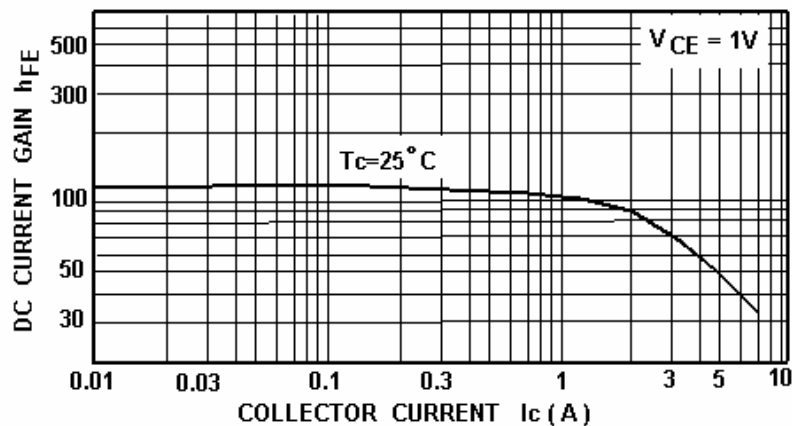


Fig.3 DC current Gain

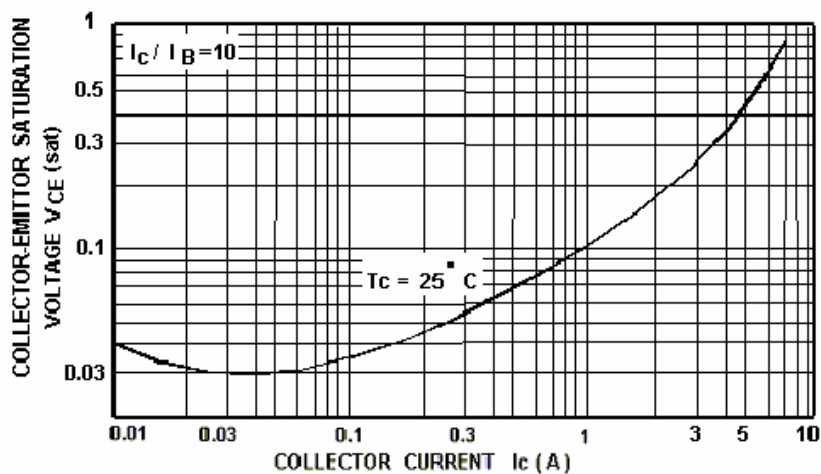


Fig.4 Collector-Emitter Saturation Voltage

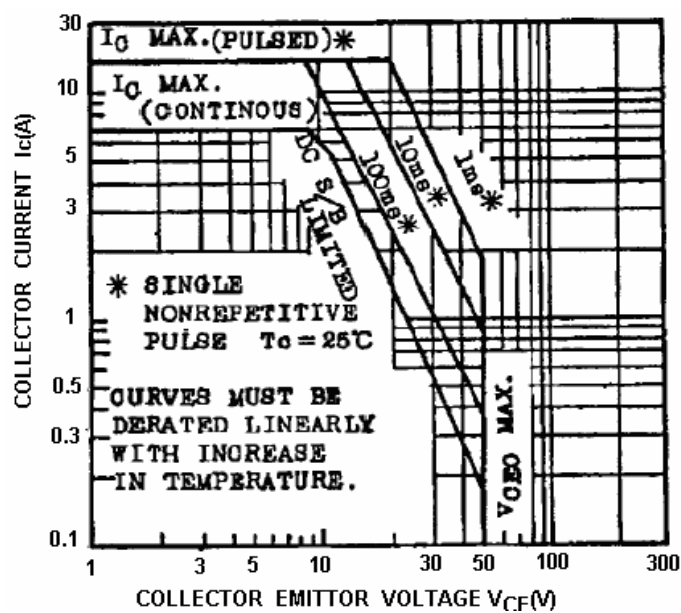


Fig.5 Safe Operating Area