

Silicon PNP Power Transistors

2SB754

DESCRIPTION

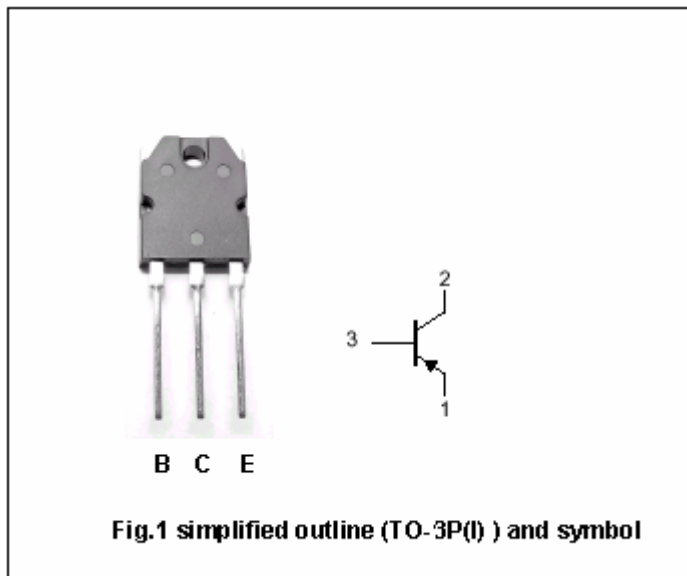
- With TO-3P(I) package
- Complement to type 2SD844
- High collector current : $I_C = -7A$
- Low collector saturation voltage
- High power dissipation

APPLICATIONS

- High current switching applications
- Power amplifier applications

PINNING

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



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

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	$T_a = 25^\circ C$	2.5	W
		$T_C = 25^\circ C$	60	
T_j	Junction temperature		150	$^\circ C$
T_{stg}	Storage temperature		-55~150	$^\circ C$

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CHARACTERISTICS

T_j=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{(BR)CEO}	Collector-emitter breakdown voltage	I _C =-50mA ; I _B =0	-50			V
V _{(BR)EBO}	Emitter-base breakdown voltage	I _E =-10mA; I _C =0	-5			V
V _{CEsat}	Collector-emitter saturation voltage	I _C =-4.0A; I _B =-0.4A		-0.2	-0.4	V
V _{BE}	Base-emitter voltage	I _C =-4A ; V _{CE} =-1V		-0.9	-1.2	V
I _{CBO}	Collector cut-off current	V _{CB} =-50V; I _E =0			-10	μA
I _{EBO}	Emitter cut-off current	V _{EB} =-5V; I _C =0			-10	μA
h _{FE-1}	DC current gain	I _C =-1A ; V _{CE} =-1V	70		240	
h _{FE-2}	DC current gain	I _C =-4A ; V _{CE} =-1V	30			
f _T	Transition frequency	I _C =-1A ; V _{CE} =-5V		10		MHz
C _{OB}	Collector output capacitance	I _E =0; f=1MHz ; V _{CB} =-10V		300		pF

◆ h_{FE-1} Classifications

O	Y
70-140	120-240

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PACKAGE OUTLINE

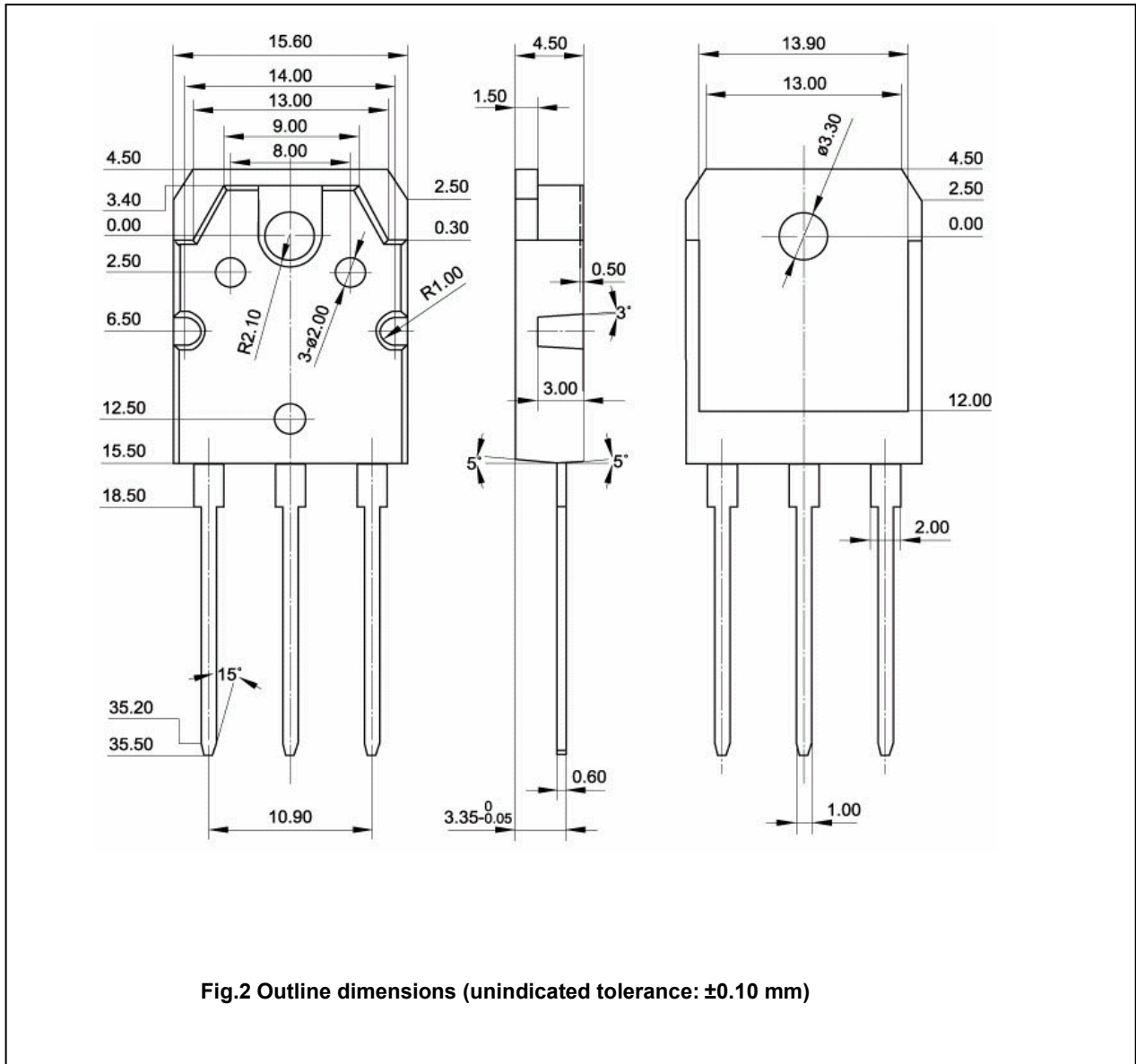


Fig.2 Outline dimensions (unindicated tolerance: ± 0.10 mm)

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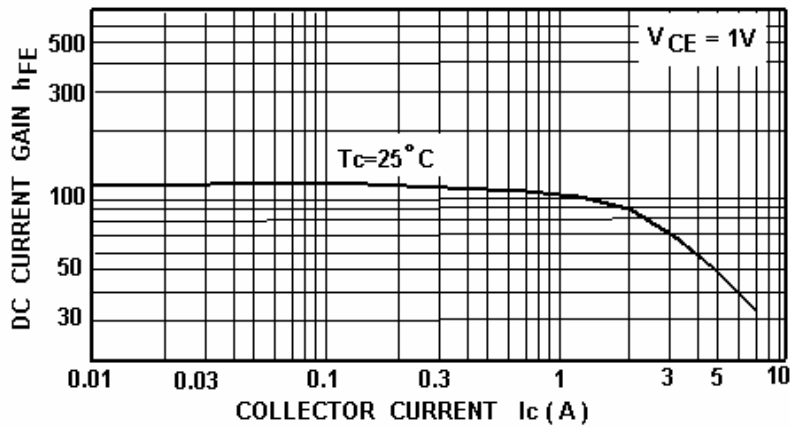


Fig.3 DC current Gain

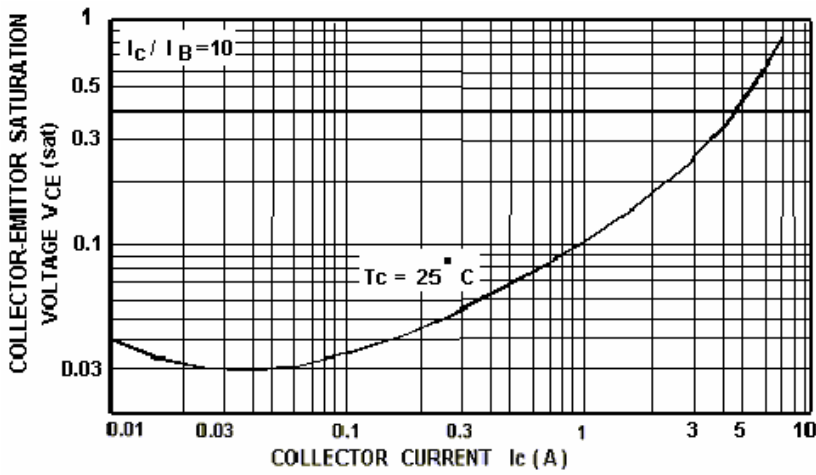


Fig.4 Collector-Emitter Saturation Voltage

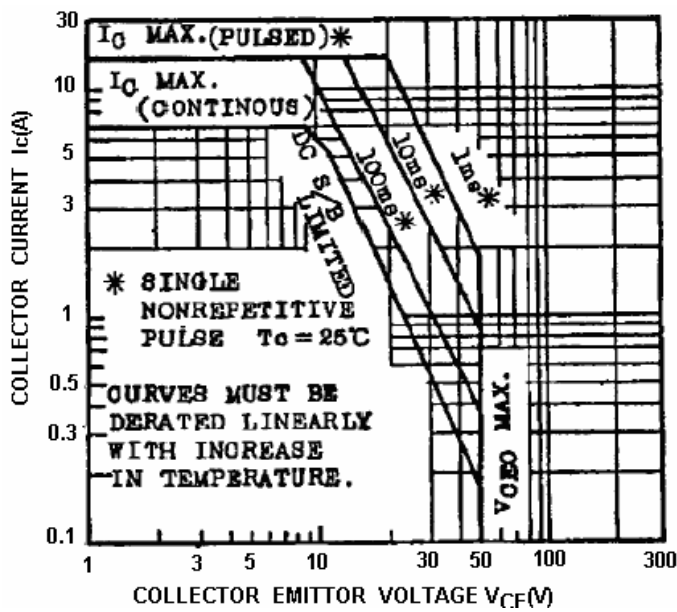


Fig.5 Safe Operating Area