

Silicon PNP Power Transistors

2SB546

DESCRIPTION

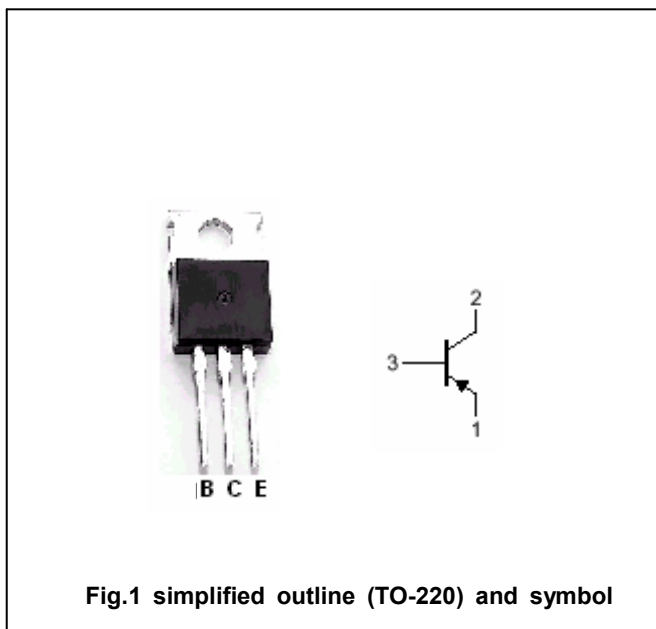
- With TO-220C package
- Complement to type 2SD401
- Collector current $I_C = -2A$
- Collector-base voltage $V_{CBO} = -200V$

APPLICATIONS

- For use in general purpose power amplifier, vertical output application

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	-200	V
V_{CEO}	Collector-emitter voltage	Open base	-150	V
V_{EBO}	Emitter-base voltage	Open collector	-5	V
I_C	Collector current		-2	A
P_C	Collector power dissipation	$T_C = 25^\circ C$	25	W
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 =-10mA; I _B =0	-150			V
V _{(BR)CBO}	Collector-base breakdown voltage	I _C =-0.5mA; I _E =0	-200			V
V _{(BR)EBO}	Emitter-base breakdown voltage	I _E =-0.5mA; I _B =0	-5			V
V _{CEsat}	Collector-emitter saturation voltage	I _C =-500mA; I _B =-50mA			-1.0	V
I _{CBO}	Collector cut-off current	V _{CB} =-150V; I _E =0			-50	μA
I _{EBO}	Emitter cut-off current	V _{EB} =-5V; I _C =0			-50	μA
h _{FE}	DC current gain	I _C =-0.4A; V _{CE} =-10V	40		240	
f _T	Transition frequency	I _C =-0.4A; V _{CE} =-10V		5		MHz

◆ h_{FE} classifications

R	O	Y
40-80	70-140	120-240

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PACKAGE OUTLINE



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

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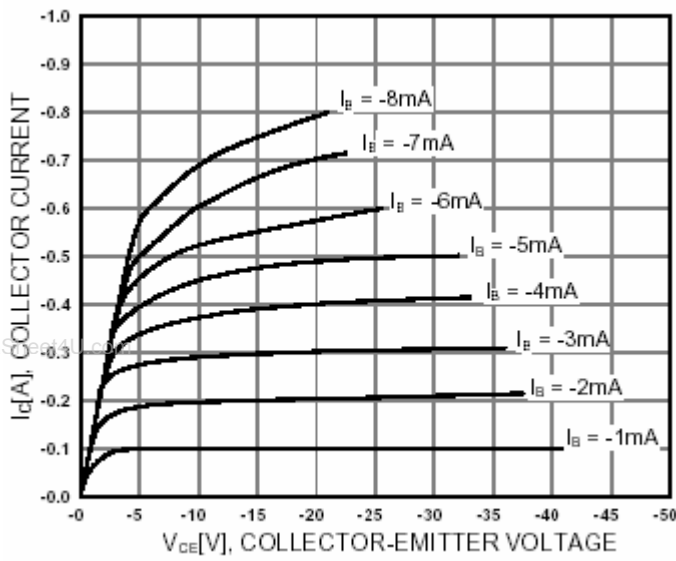


Fig.3 Static Characteristic

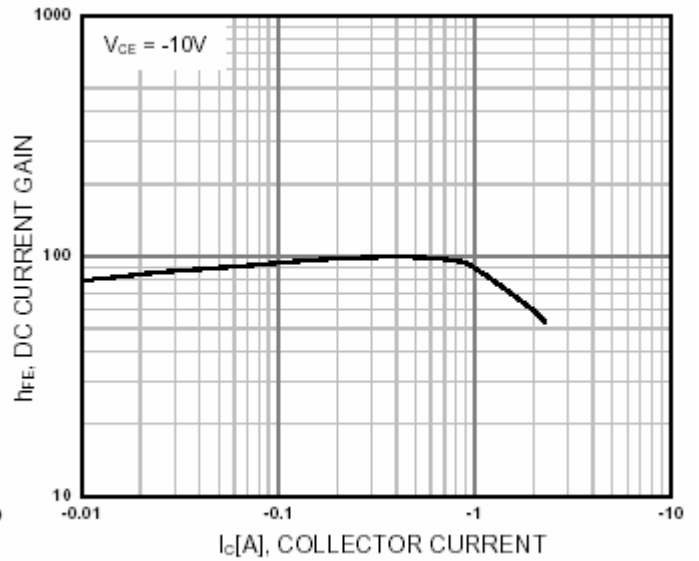


Fig.4 DC current Gain

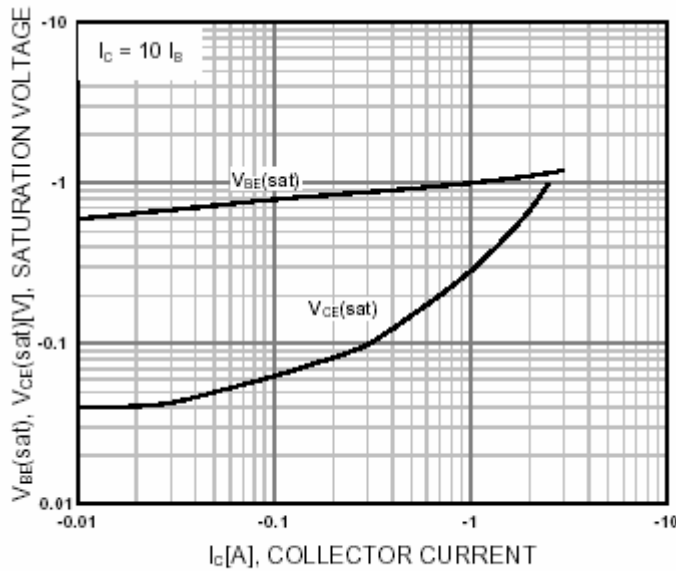


Fig.5 Base-Emitter Saturation Voltage
Collector-Emitter Saturation Voltage

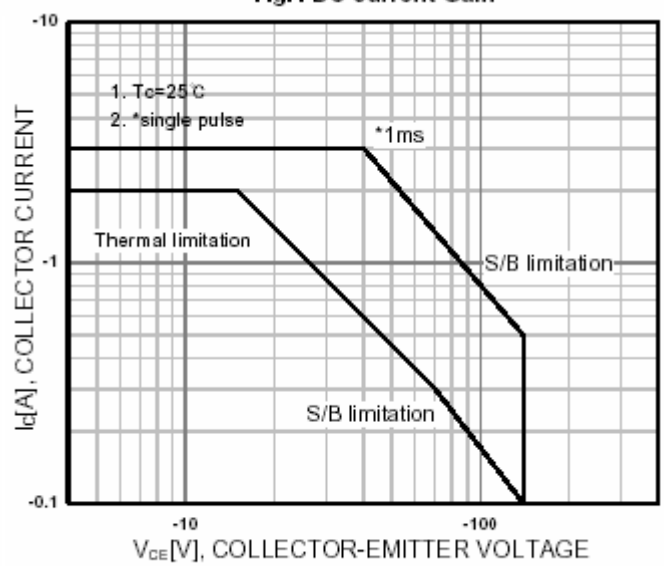


Fig.6 Safe Operating Area

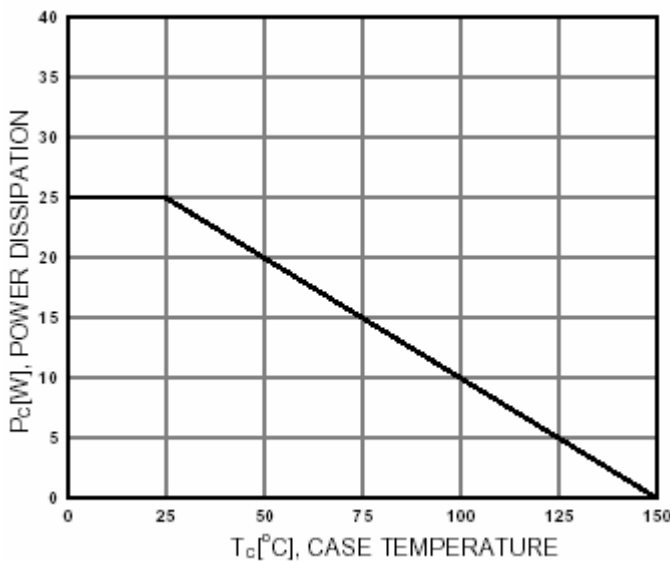


Fig.7 Power Derating