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

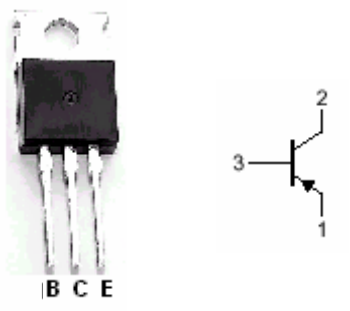

Fig.1 simplified outline (TO-220) and symbol

Absolute maximum ratings (Ta=25□)

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□	25	W
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
$V_{(BR)CEO}$	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 votage	I_E=-0.5mA; I_B=0	-5			V
V_{CEsat}	Collector-emitter saturation voltage	I_C=-500m A;I_B=-50m A			-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

PACKAGE OUTLINE

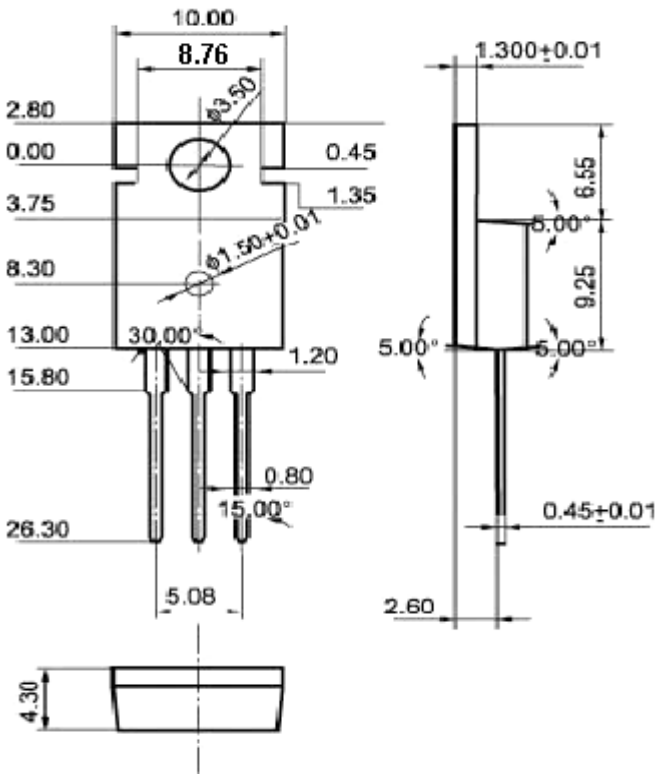

Fig.2 Outline dimensions (unindicated tolerance:±0.10 mm)

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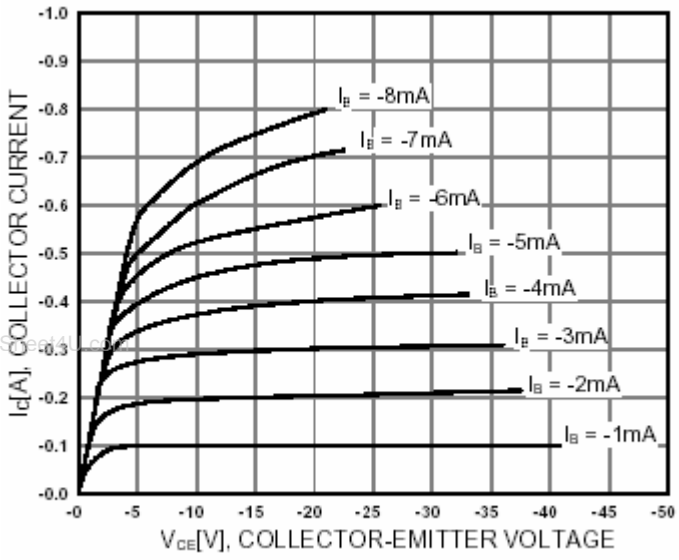

Fig.3 Static Characteristic

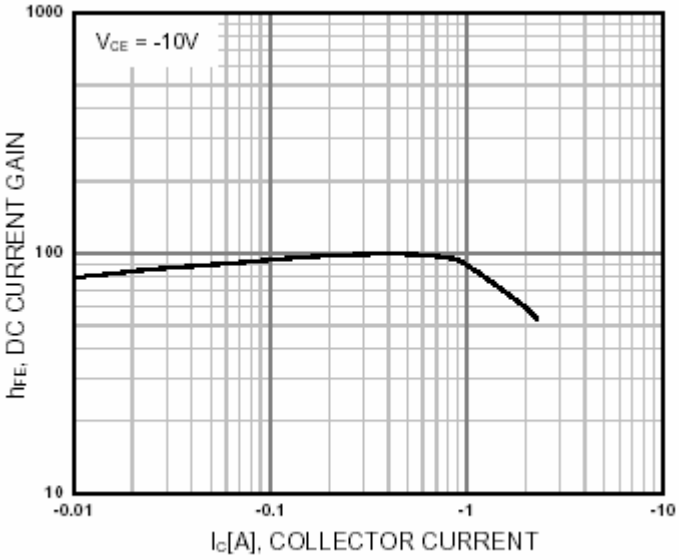

Fig.4 DC current Gain

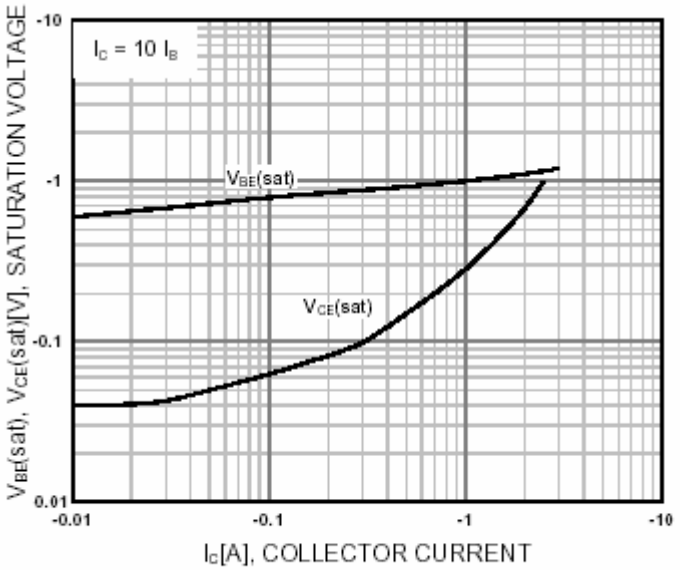

Fig.5 Base-Emitter Saturation Voltage
Collector-Emitter Saturation Voltage

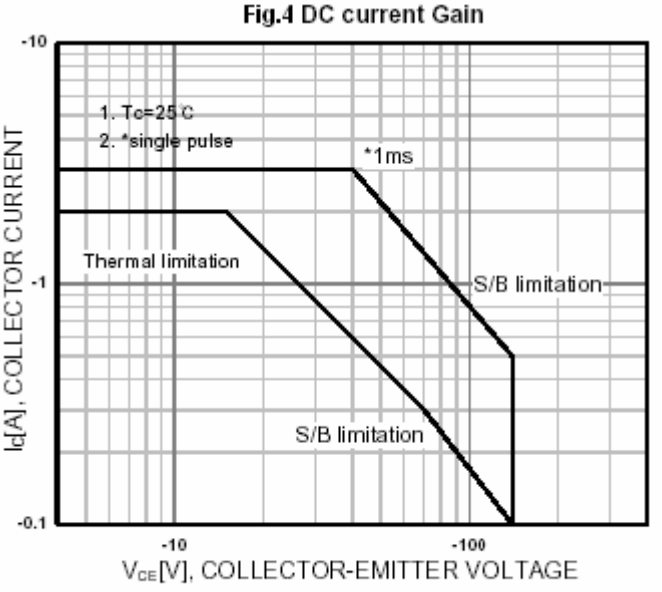

Fig.6 Safe Operating Area

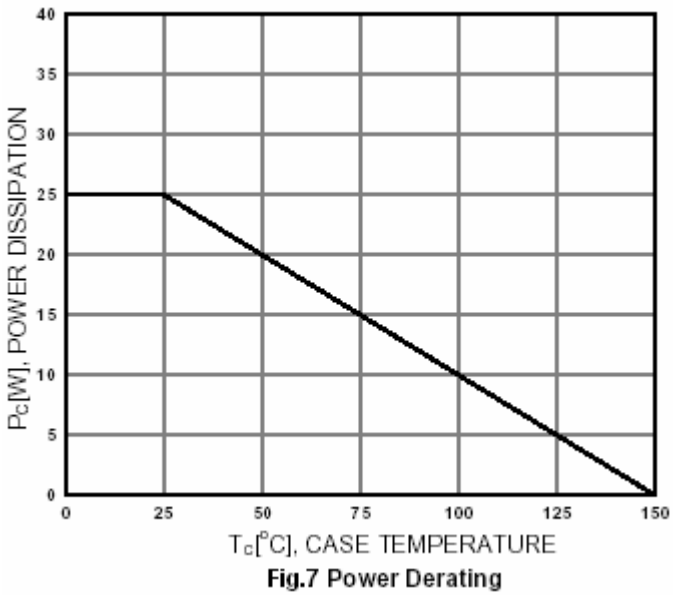

Fig.7 Power Derating