

Silicon PNP Power Transistors

2SB596

DESCRIPTION

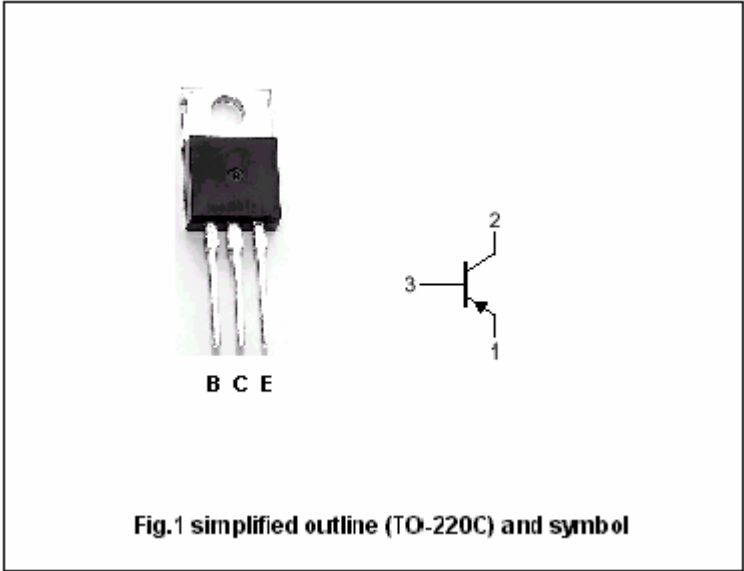
- With TO-220C package
- Complement to type 2SD526
- Good linearity of h_{FE}

APPLICATIONS

- Power amplifier applications
- Recommend for 20~25W high fidelity audio frequency amplifier output stage

PINNING

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



Absolute maximum ratings($T_c=25^{\circ}\text{C}$)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	Open emitter	-80	V
V_{CEO}	Collector-emitter voltage	Open base	-80	V
V_{EBO}	Emitter-base voltage	Open collector	-5	V
I_C	Collector current		-4	A
I_E	Emitter current		-4	A
I_B	Base current		-3	A
P_C	Collector power dissipation	$T_c=25^{\circ}\text{C}$	30	W
T_j	Junction temperature		150	$^{\circ}\text{C}$
T_{stg}	Storage temperature		-55~150	$^{\circ}\text{C}$

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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	-80			V
V _{(BR)EBO}	Emitter-base breakdown voltage	I _E =-10mA; I _C =0	-5			V
V _{CEsat}	Collector-emitter saturation voltage	I _C =-3 A; I _B =-0.3 A			-1.7	V
V _{BE}	Base-emitter on voltage	I _C =-3A ; V _{CE} =-5V			-1.5	V
I _{CBO}	Collector cut-off current	V _{CB} =-80V; I _E =0			-30	μA
I _{EBO}	Emitter cut-off current	V _{EB} =-5V; I _C =0			-100	μA
h _{FE-1}	DC current gain	I _C =-0.5A ; V _{CE} =-5V	40		240	
h _{FE-2}	DC current gain	I _C =-3A ; V _{CE} =-5V	15			
f _T	Transition frequency	I _C =-0.5A ; V _{CE} =-5V	3			MHz
C _{OB}	Output capacitance	I _E =0; V _{CB} =-10V; f=1MHz		130		pF

◆ h_{FE-1} classifications

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

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PACKAGE OUTLINE

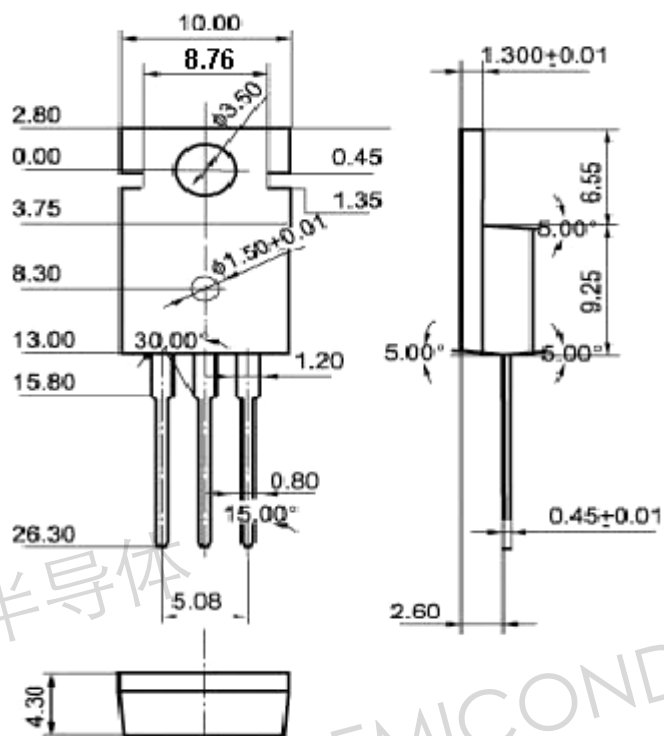


Fig.2 Outline dimensions (unindicated tolerance: ± 0.10 mm)

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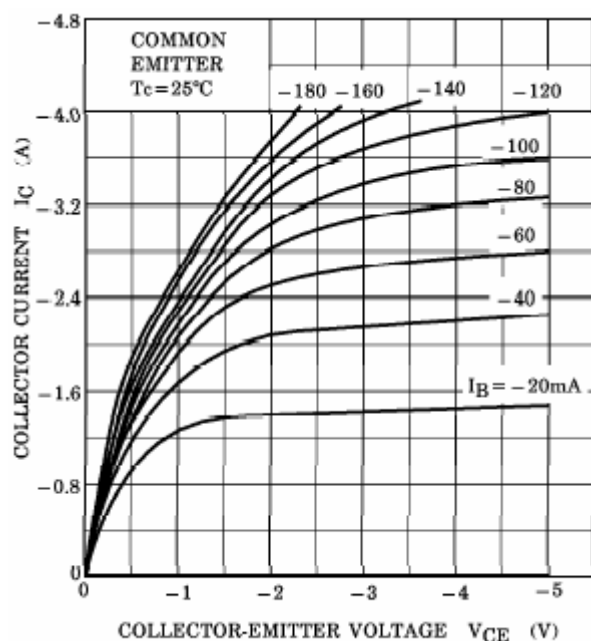


Fig.3 Static Characteristic

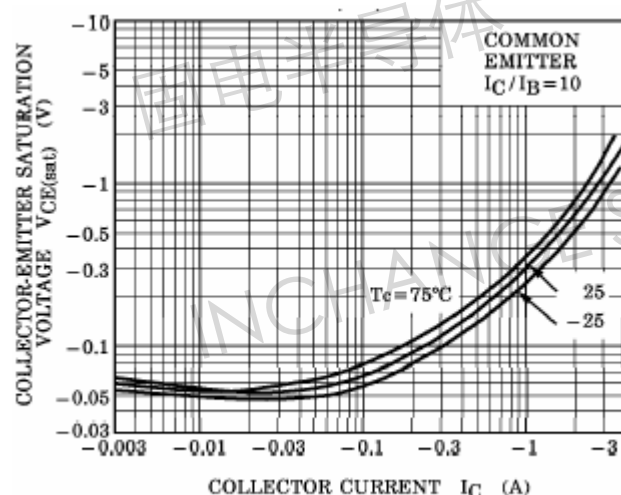


Fig.5 Collector-Emitter Saturation Voltage

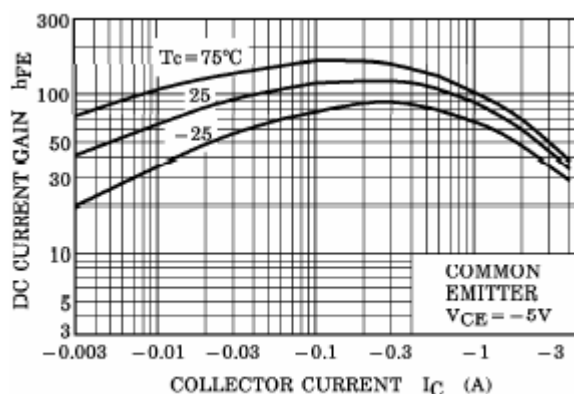


Fig.4 DC current Gain

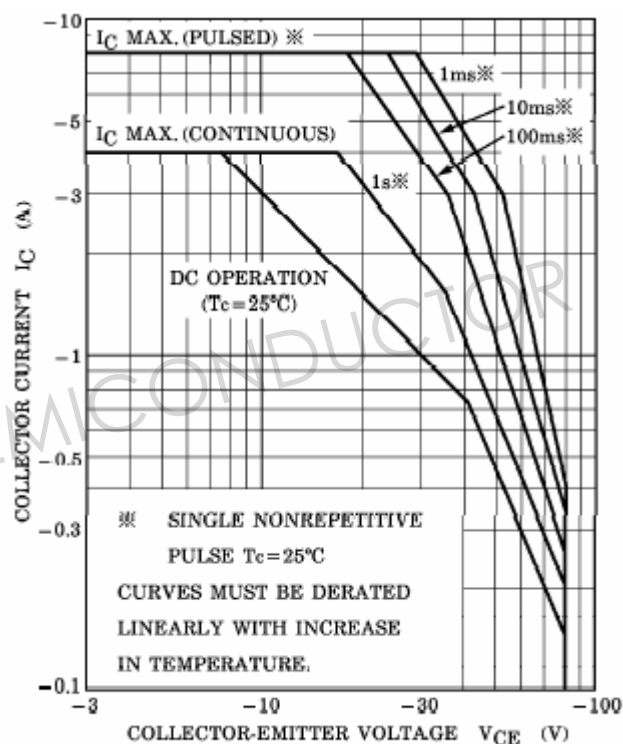


Fig.6 Safe Operating Area