

Silicon PNP Power Transistors

2SB596

DESCRIPTION

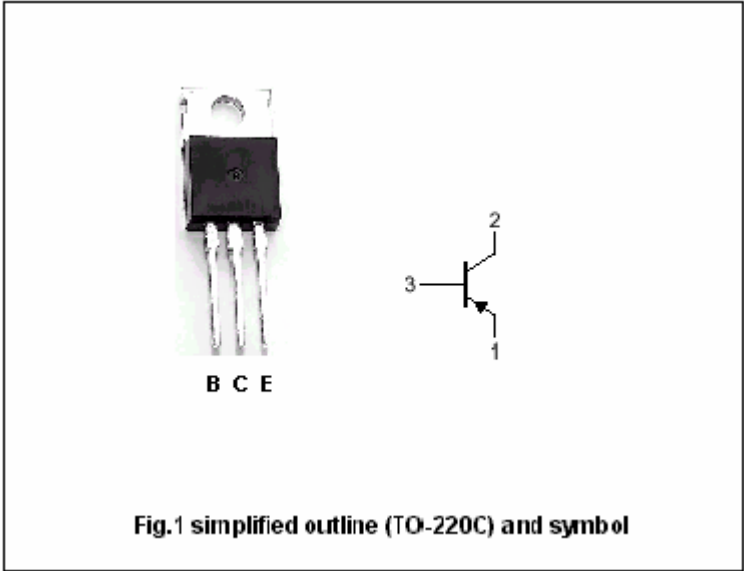
- With TO-220C package
- Complement to type 2SD526
- Good linearity of h_{FE}

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($T_c=25^{\circ}$)

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	$T_c=25^{\circ}$	30	W
T_j	Junction temperature		150	$^{\circ}$
T_{stg}	Storage temperature		-55~150	$^{\circ}$

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CHARACTERISTICS

Tj=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)CEO}$	Collector-emitter breakdown voltage	$I_C=-50mA; I_B=0$	-80			V
$V_{(BR)EBO}$	Emitter-base breakdown voltage	$I_E=-10mA; I_C=0$	-5			V
V_{CEsat}	Collector-emitter saturation voltage	$I_C=-3A; I_B=-0.3A$			-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

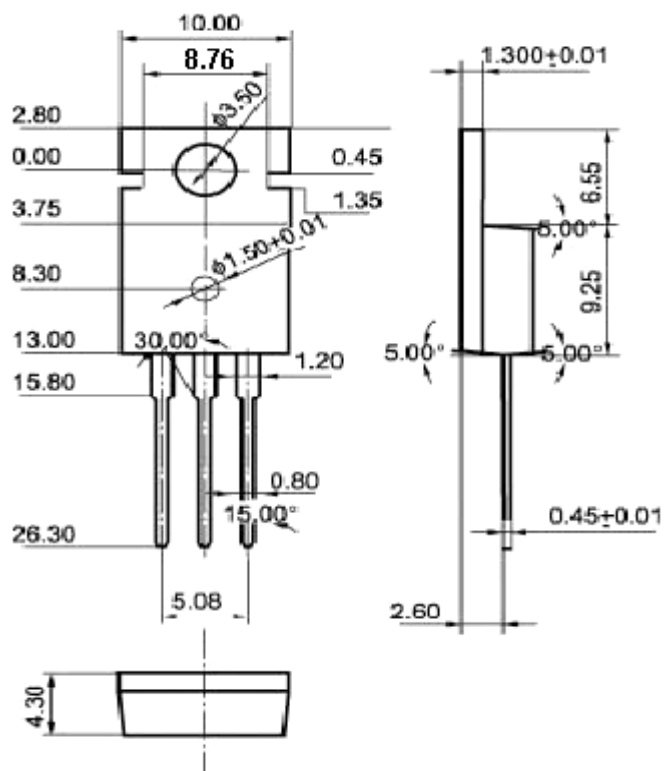


Fig.2 Outline dimensions (unindicated tolerance:±0.10 mm)

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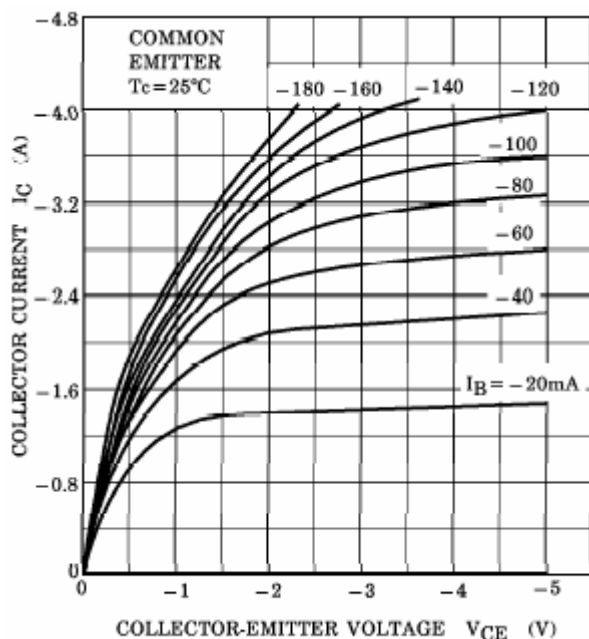


Fig.3 Static Characteristic

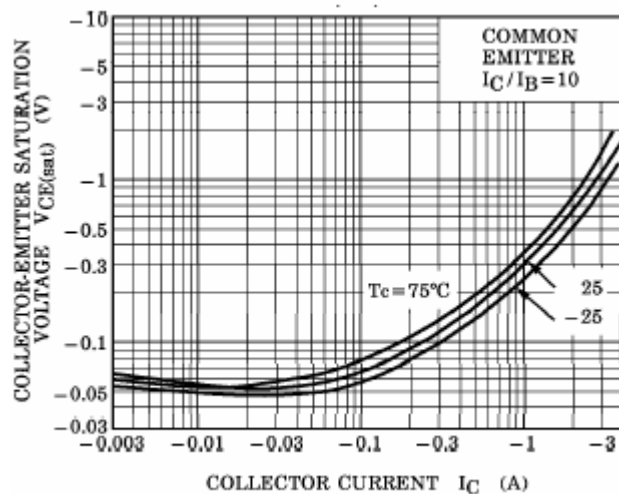


Fig.5 Collector-Emitter Saturation Voltage

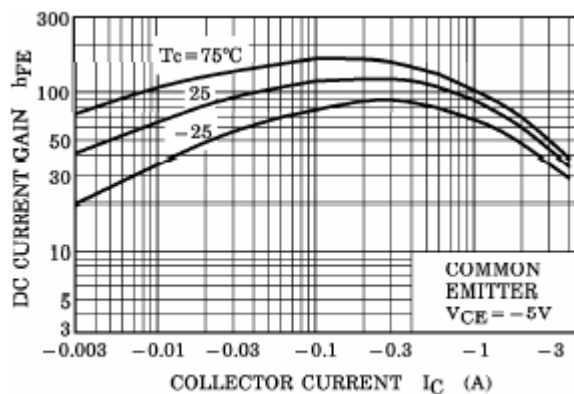


Fig.4 DC current Gain

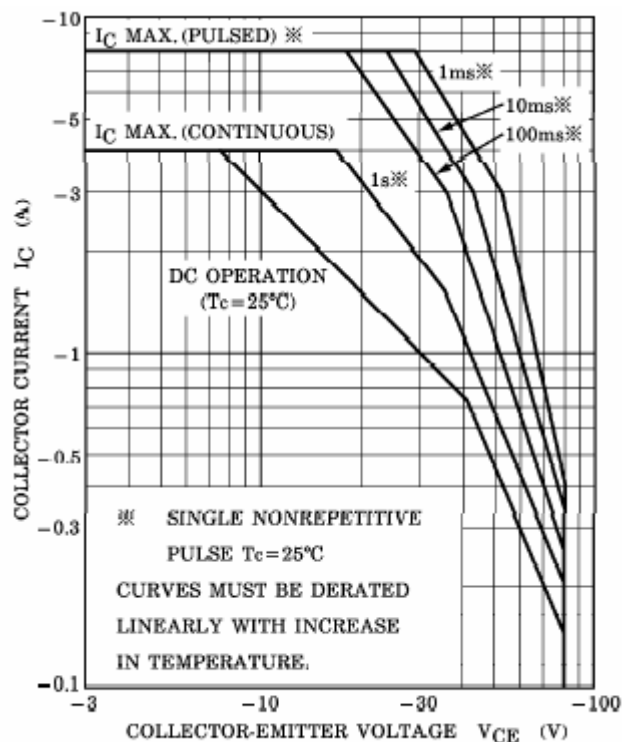


Fig.6 Safe Operating Area