

Silicon NPN Power Transistors

2SD526

DESCRIPTION

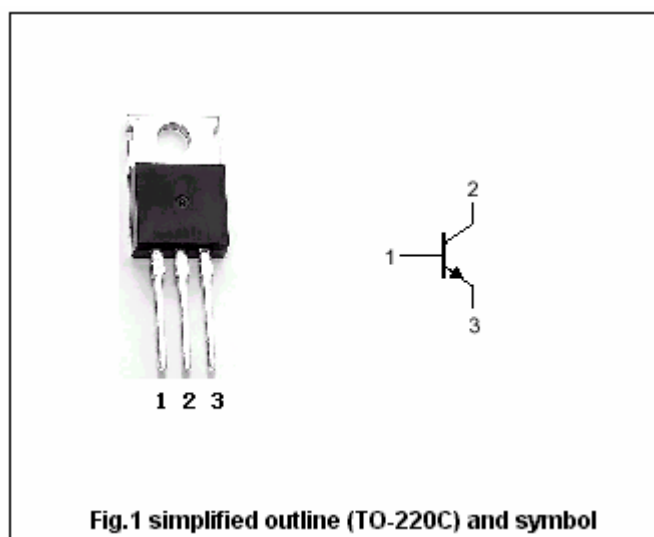
- With TO-220C package
- Complement to type 2SB596
- Good linearity of h_{FE}

APPLICATIONS

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

PINNING

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

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

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_B	Base current		0.4	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°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_{CEsat}	Collector-emitter saturation voltage	$I_C=3A; I_B=0.3A$			1.5	V
V_{BE}	Base-emitter 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	$I_C=0.5A; V_{CE}=5V$		8		MHz
C_{OB}	Output capacitance	$I_E=0; V_{CB}=10V; f=1MHz$		90		pF

◆ h_{FE-1} classifications

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

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PACKAGE OUTLINE

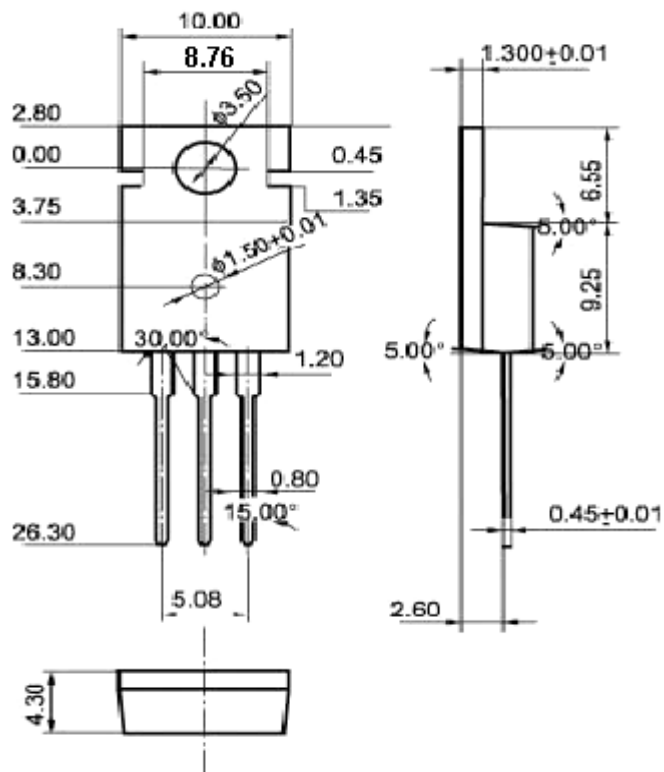


Fig.2 Outline dimensions (unindicated tolerance:±0.10 mm)

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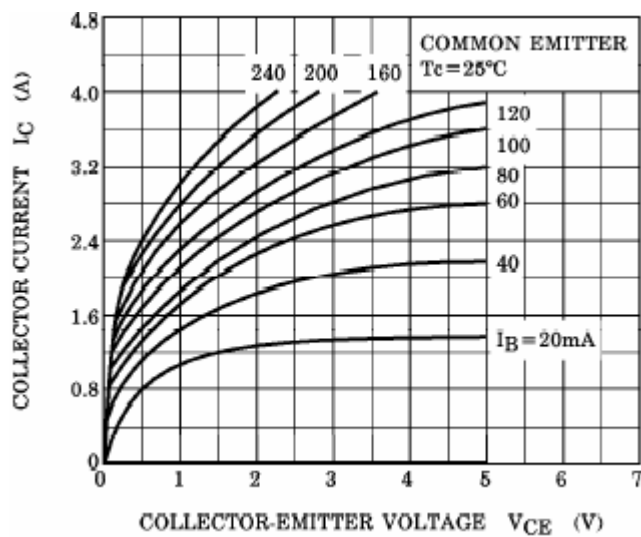


Fig.3 Static Characteristic

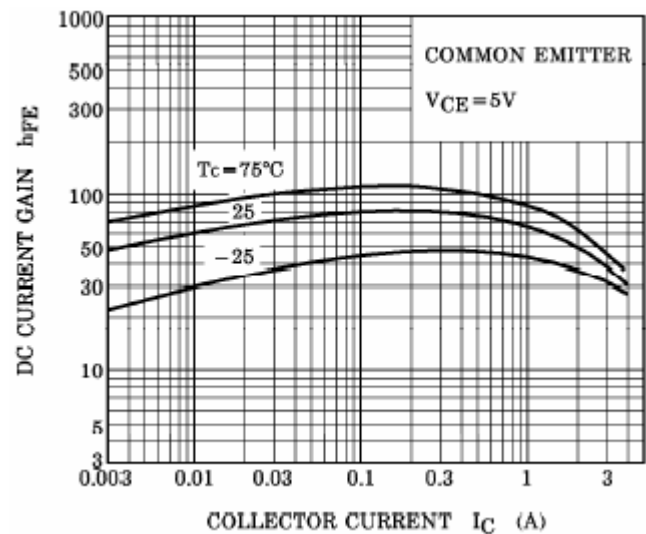


Fig.4 DC current Gain

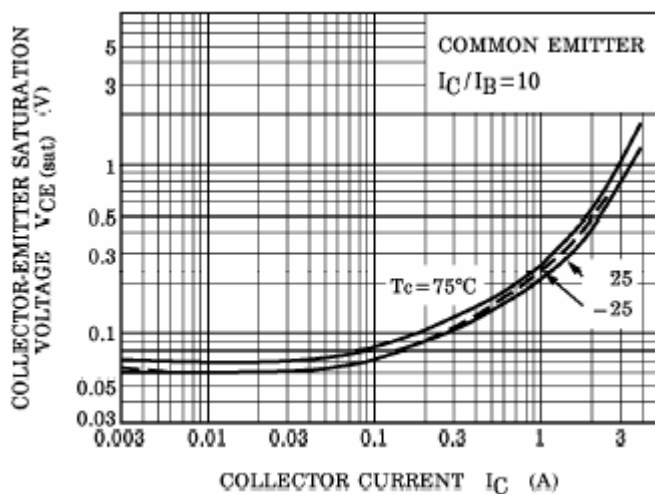


Fig.5 Collector-Emitter Saturation Voltage

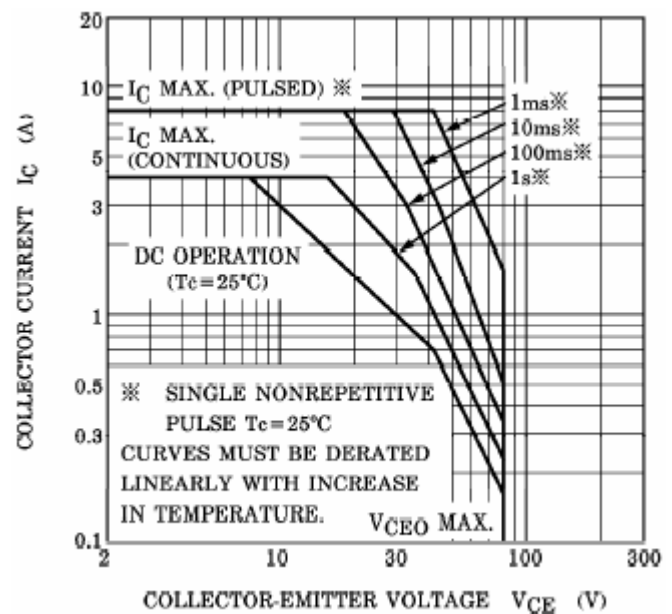


Fig.6 Safe Operating Area