Silicon PNP Power Transistors 2SB595

DESCRIPTION

- With TO-220C package
- Complement to type 2SD525
- High breakdown voltage :V_{CEO}=-100V
- Low collector saturation volage
  : $V_{CE(sat)}$=-2.0V(Max)

APPLICATIONS

- Power amplifier applications
- Recommend for 30W high fidelity audio frequency amplifier output stage

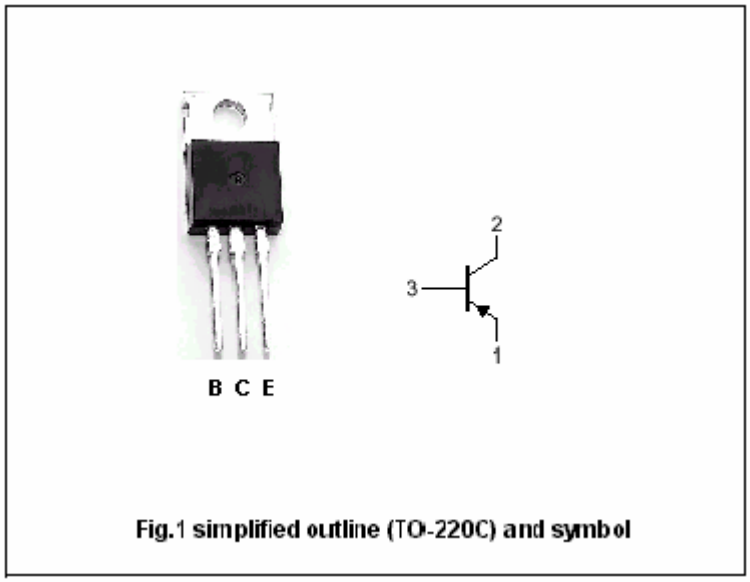

Fig.1 simplified outline (TO-220C) and symbol

PINNING

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

Absolute maximum ratings(Tc=25℃)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	Open emitter	-100	V
V_{CEO}	Collector-emitter voltage	Open base	-100	V
V_{EBO}	Emitter-base voltage	Open collector	-5	V
I_C	Collector current		-5	A
I_E	Emitter current		-5	A
I_B	Base current		-4	A
P_C	Collectorl power dissipation	T_C=25℃	40	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=-50mA; I_B=0	-100			V
$V_{(BR)EBO}$	Emitter-base breakdown votage	I_E=-10mA; I_C=0	-5			V
V_{CEsat}	Collector-emitter saturation voltage	I_C=-4A;I_B=-0.4 A			-2.0	V
V_{BE}	Base-emitter on voltage	I_C=-4A ; V_{CE}=-5V			-1.5	V
I_{CBO}	Collector cut-off current	V_{CB}=-100V; I_E=0			-100	μA
I_{EBO}	Emitter cut-off current	V_{EB}=-5V; I_C=0			-1	mA
h_{FE-1}	DC current gain	I_C=-1A ; V_{CE}=-5V	40		240	
h_{FE-2}	DC current gain	I_C=-4A ; V_{CE}=-5V	20			
f_T	Transition frequency	I_C=-1A ; V_{CE}=-5V		5		MHz
C_{OB}	Output capacitance	I_E=0; V_{CB}=-10V;f=1MHz		270		pF

◆ **h_{FE-1} classifications**

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

PACKAGE OUTLINE

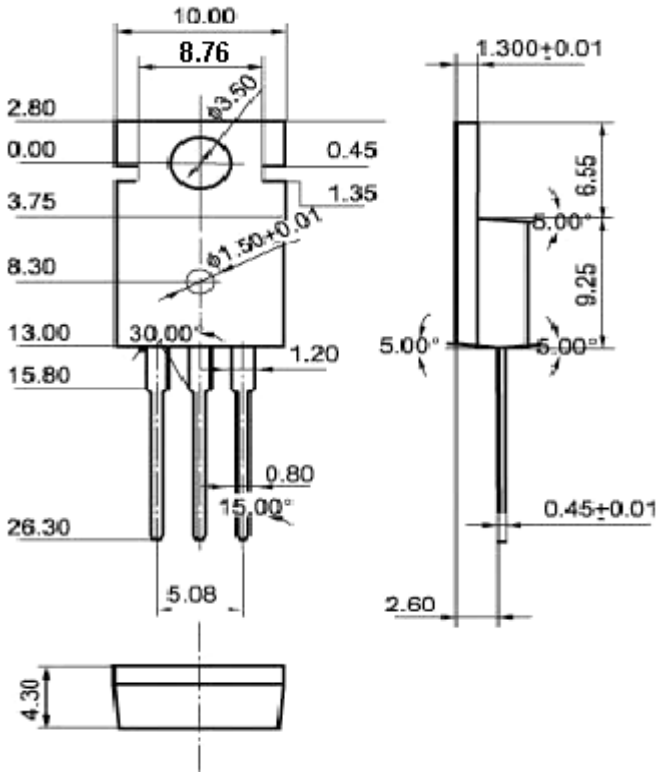

Fig.2 Outline dimensions (unindicated tolerance:±0.10 mm)

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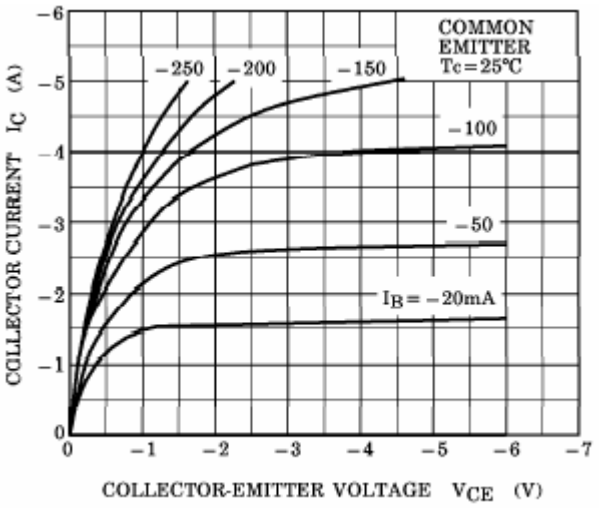

Fig.3 Static Characteristic

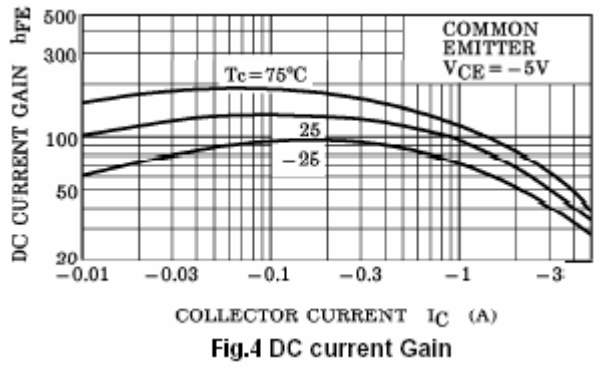

Fig.4 DC current Gain

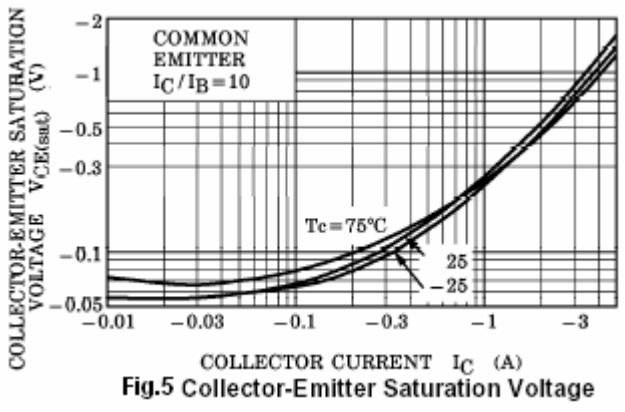

Fig.5 Collector-Emitter Saturation Voltage

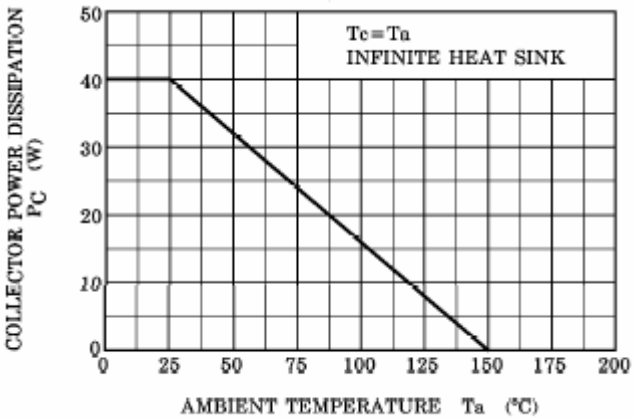

Fig.6 Power Derating

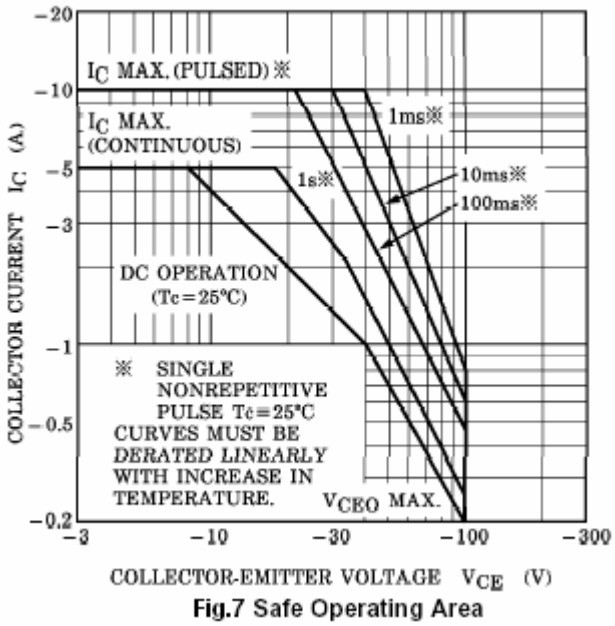

Fig.7 Safe Operating Area