

Silicon NPN Power Transistors

2SB1037

DESCRIPTION

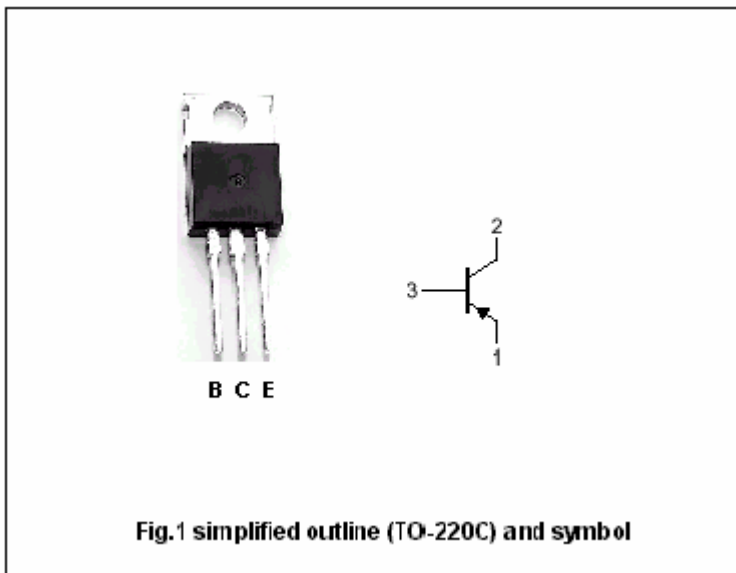
- With TO-220 package
- High allowable collector dissipation.
- Complement to type 2SD1459

APPLICATIONS

- For color TV vertical output, sound output applications

PINNING

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



Absolute maximum ratings (Ta=25°C)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V _{CBO}	Collector-base voltage	Open emitter	-150	V
V _{CEO}	Collector-emitter voltage	Open base	-150	V
V _{EBO}	Emitter-base voltage	Open collector	-5	V
I _C	Collector current		-1.5	A
I _{CM}	Collector current-peak		-3	A
P _C	Collector power dissipation		2.0	W
		T _C =25°C	30	
T _j	Junction temperature		175	°C
T _{stg}	Storage temperature		-55~175	°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 =-10mA ; I _B =0	-150			V
V _{CEsat}	Collector-emitter saturation voltage	I _C =-0.5A, I _B =-50mA			-1.5	V
V _{BEsat}	Base-emitter saturation voltage	I _C =-0.5A, I _B =-50mA			-1.2	V
I _{CBO}	Collector cut-offcurrent	V _{CB} =-120V; I _E =0			-10	μA
I _{EBO}	Emitter cut-offcurrent	V _{EB} =-5V; I _C =0			-10	μA
h _{FE}	DC current gain	I _C =-0.3A ; V _{CE} =-5V	70		200	
f _T	Transition frequency	I _C =-0.1A ; V _{CE} =-5V		15		MHz

◆ h_{FE} classifications

Q	R
70-140	100-200

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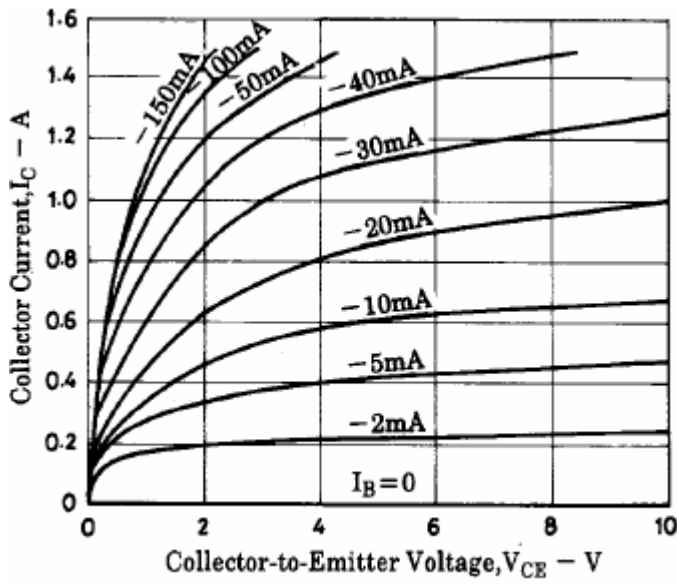


Fig.3 Static Characteristic

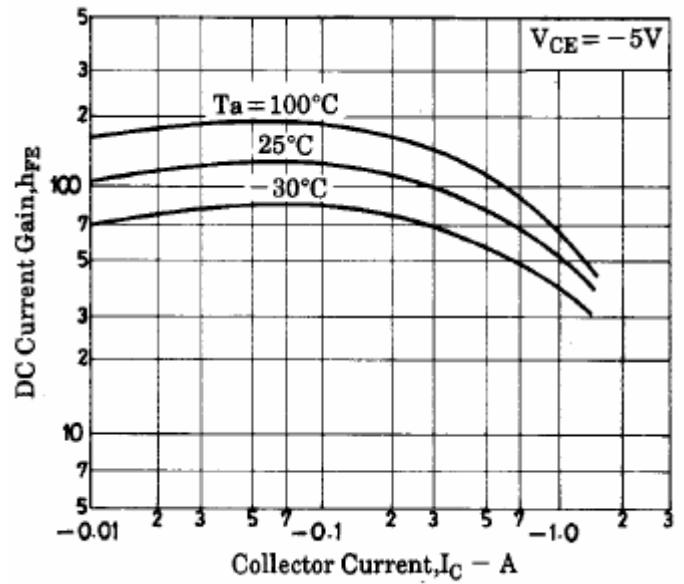


Fig.4 DC current Gain

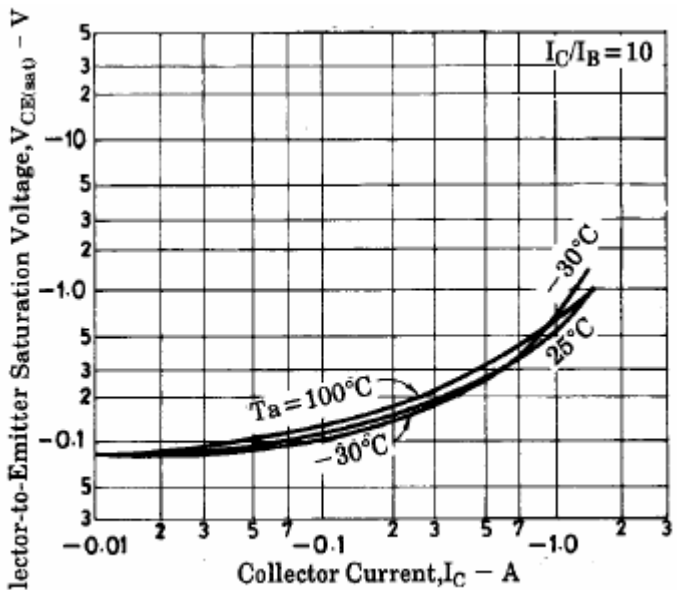


Fig.5 Collector-Emmitter Saturation Voltage

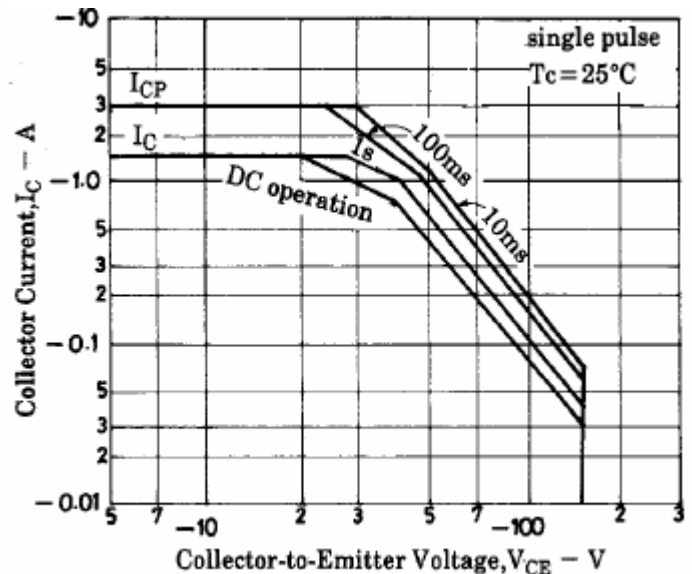


Fig.6 Safe Operating Area