

Silicon PNP Power Transistors

2SA1837

DESCRIPTION

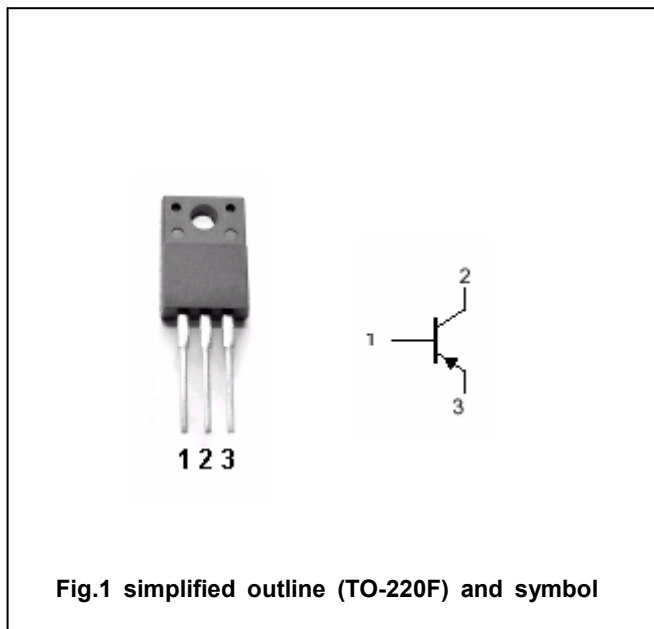
- With TO-220F package
- Complement to type 2SC4793
- High transition frequency

APPLICATIONS

- Power amplifier applications
- Driver stage amplifier applications

PINNING

PIN	DESCRIPTION
1	Base
2	Collector
3	Emitter



Absolute maximum ratings (Ta=25°C)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V _{CBO}	Collector-base voltage	Open emitter	-230	V
V _{CEO}	Collector-emitter voltage	Open base	-230	V
V _{EBO}	Emitter-base voltage	Open collector	-5	V
I _C	Collector current		-1	A
I _B	Base current		-0.1	A
P _C	Collector dissipation	T _C =25°C	20	W
		T _a =25°C	2.0	
T _j	Junction temperature		150	°C
T _{stg}	Storage temperature		-55~150	°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	-230			V
V _{CEsat}	Collector-emitter saturation voltage	I _C =-0.5A ; I _B =-50mA			-1.5	V
V _{BE}	Base-emitter voltage	I _C =-0.5A ; V _{CE} =-5V			-1.0	V
I _{CBO}	Collector cut-off current	V _{CB} =-230V ; I _E =0			-1.0	μA
I _{EBO}	Emitter cut-off current	V _{EB} =-5V ; I _C =0			-1.0	μA
h _{FE}	DC current gain	I _C =-0.1A ; V _{CE} =-5V	100		320	
C _{OB}	Output capacitance	I _E =0 ; V _{CB} =-10V ; f=1MHz		30		pF
f _T	Transition frequency	I _C =-0.1A ; V _{CE} =-10V		70		MHz

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PACKAGE OUTLINE

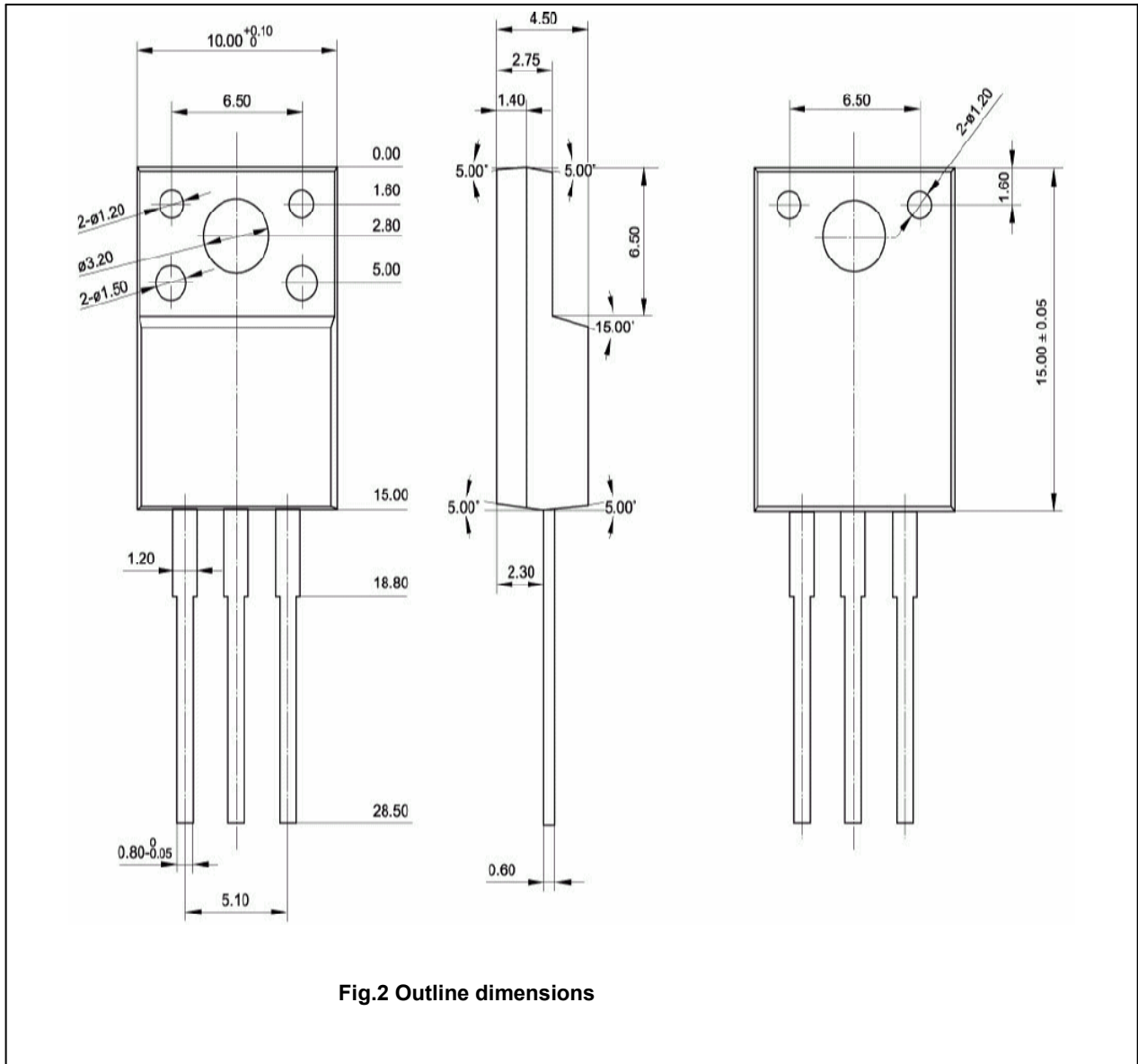


Fig.2 Outline dimensions

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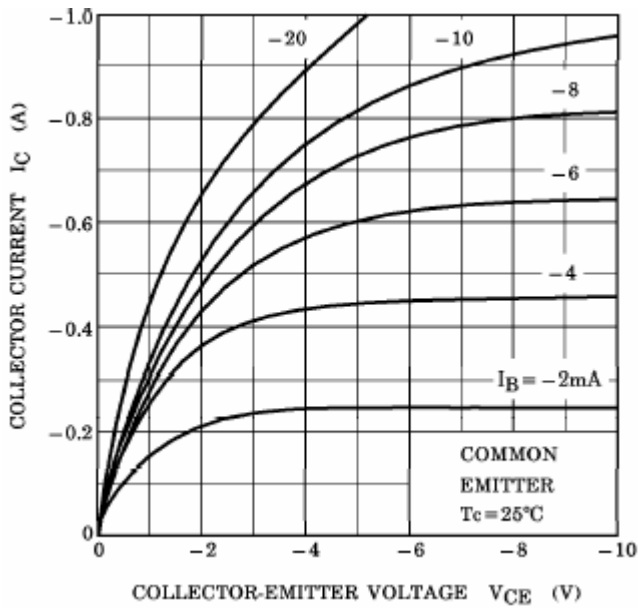


Fig.3 Static Characteristic

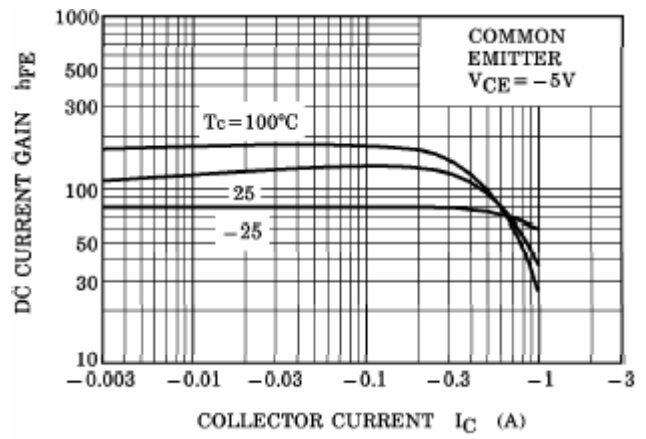


Fig.4 DC current Gain

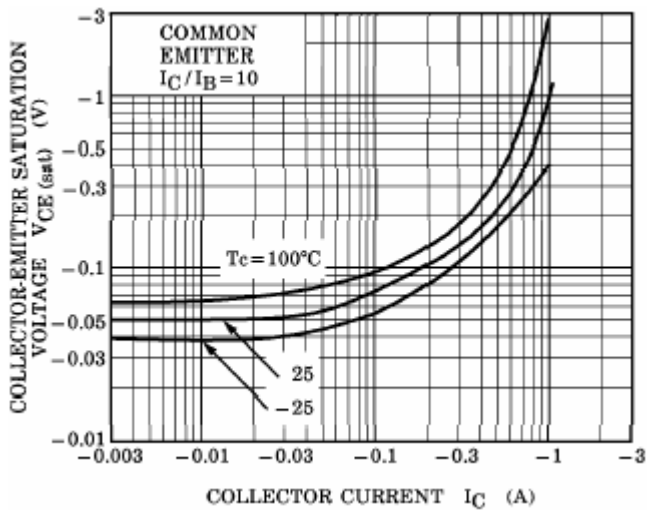


Fig.5 Collector-Emitter Saturation Voltage

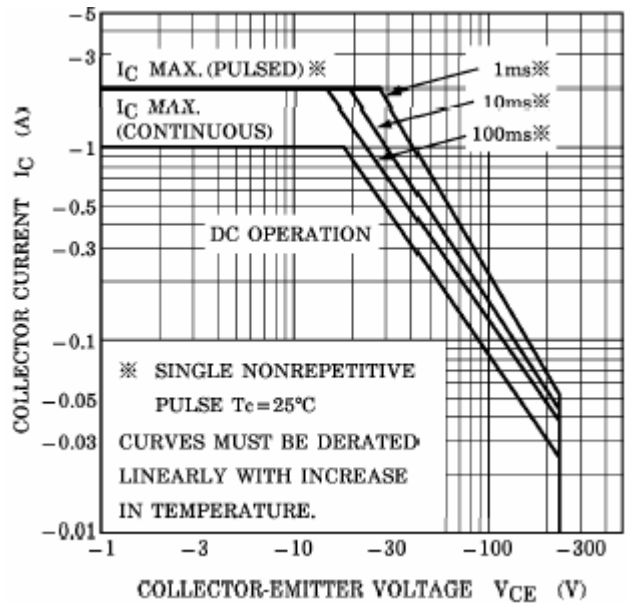


Fig.6 Safe Operating Area