

Silicon NPN Power Transistors

2SC4793

DESCRIPTION

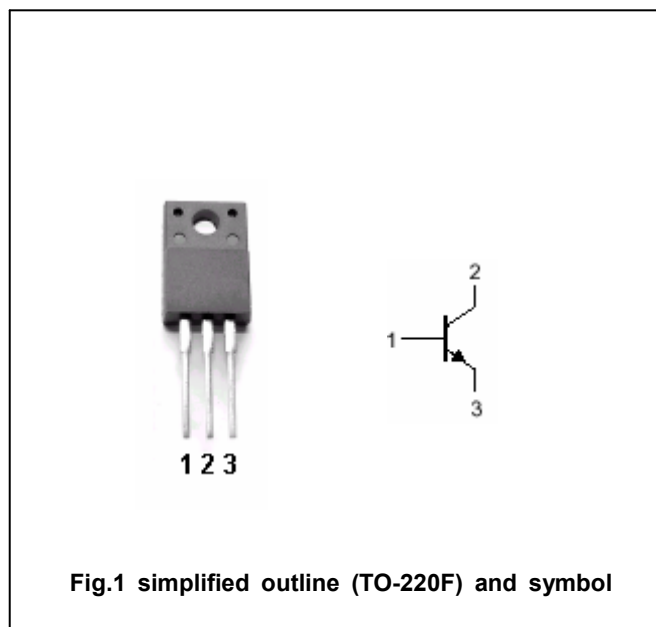
- With TO-220F package
- Complement to type 2SA1837
- High transition frequency

APPLICATIONS

- Power amplifier applications
- Driver stage amplifier applications

PINNING

PIN	DESCRIPTION
1	Base
2	Collector
3	Emitter

Absolute maximum ratings ($T_a=25^\circ\text{C}$)

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	$T_C=25^\circ\text{C}$	20	W
		$T_a=25^\circ\text{C}$	2.0	
T_j	Junction temperature		150	$^\circ\text{C}$
T_{stg}	Storage temperature		-55~150	$^\circ\text{C}$

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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		20		pF
f _T	Transition frequency	I _C =0.1A ; V _{CE} =10V		100		MHz

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PACKAGE OUTLINE

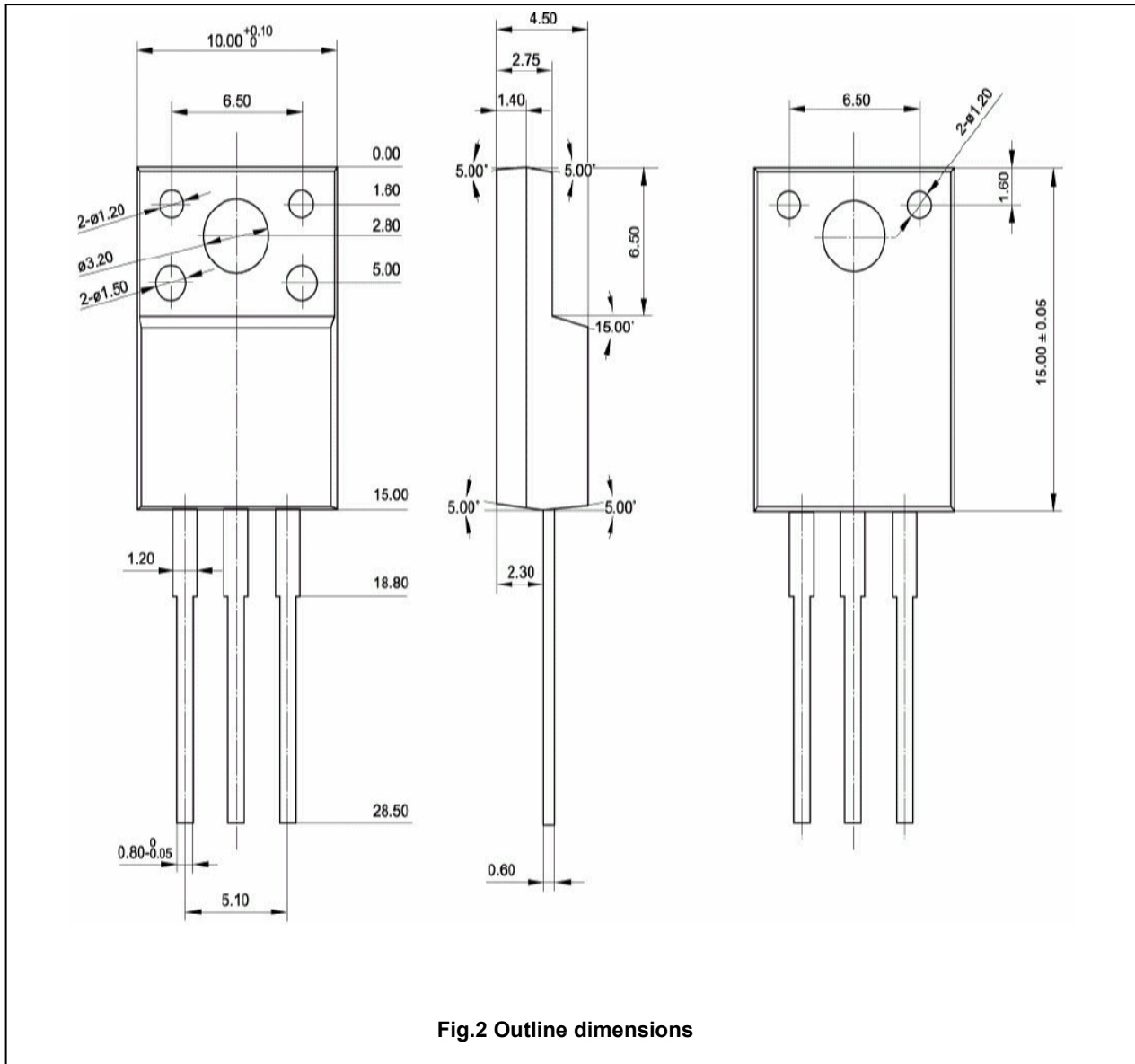


Fig.2 Outline dimensions

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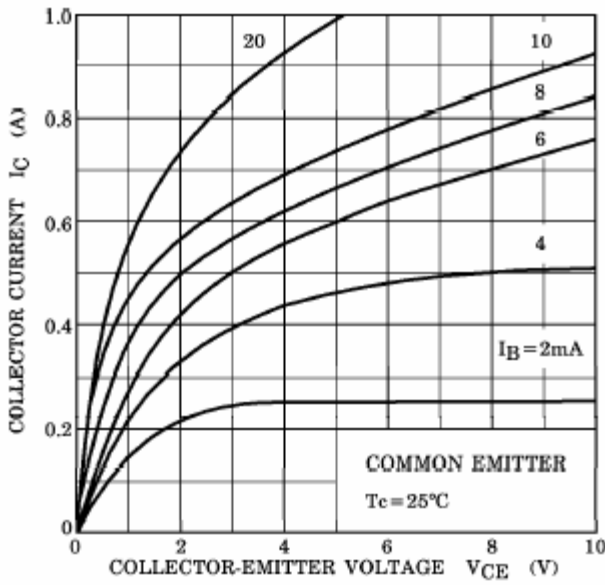


Fig.3 Static Characteristic

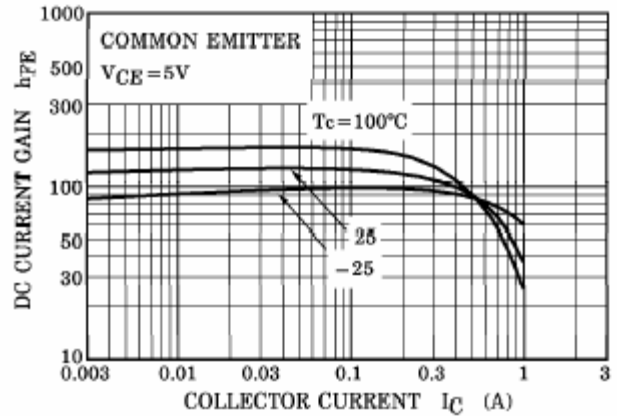


Fig.4 DC current Gain

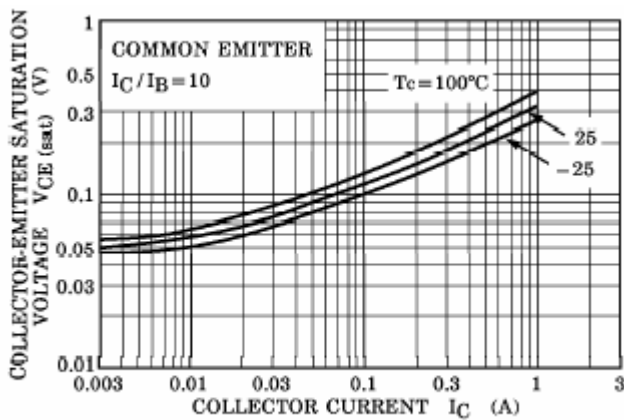


Fig.5 Collector-Emitter Saturation Voltage

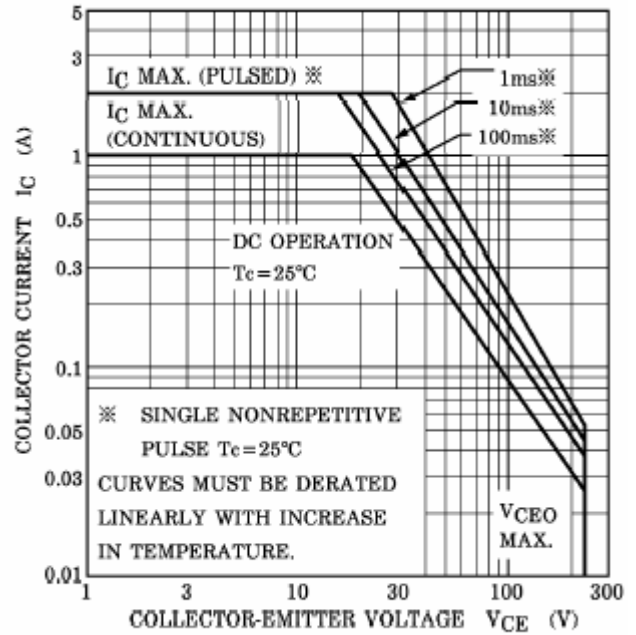


Fig.6 Safe Operating Area