

Silicon PNP Power Transistors

2SA1869

DESCRIPTION

- With TO-220F package
- Complement to type 2SC4935

APPLICATIONS

- Power amplifier applications

PINNING

PIN	DESCRIPTION
1	Base
2	Collector
3	Emitter

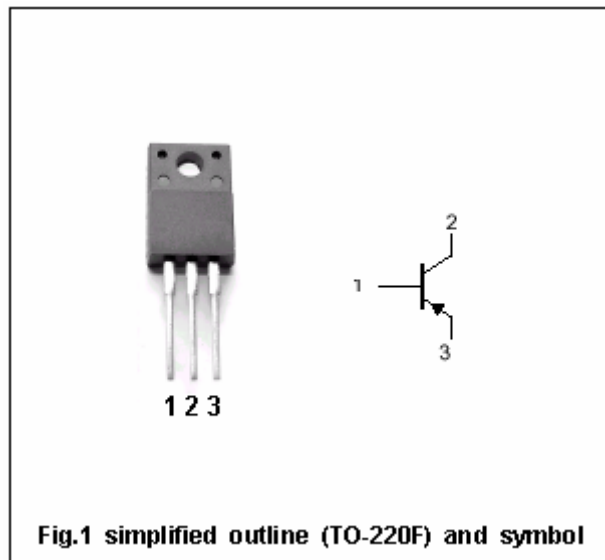


Fig.1 simplified outline (TO-220F) and symbol

Absolute maximum ratings (Ta=25°C)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	Open emitter	-50	V
V_{CEO}	Collector-emitter voltage	Open base	-50	V
V_{EBO}	Emitter-base voltage	Open collector	-5	V
I_C	Collector current		-3	A
I_B	Base current		-0.3	A
P_C	Collector dissipation	$T_C=25^\circ\text{C}$	10	W
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	-50			V
V _{CEsat}	Collector-emitter saturation voltage	I _C =-2A ; I _B =-0.2A		-0.3	-0.6	V
V _{BE}	Base-emitter voltage	I _C =-0.5A ; V _{CE} =-2V		-0.8	-1.0	V
I _{CBO}	Collector cut-off current	V _{CB} =-50V ; I _E =0			-1.0	μ A
I _{EBO}	Emitter cut-off current	V _{EB} =-5V ; I _C =0			-1.0	μ A
h _{FE-1}	DC current gain	I _C =-0.5A ; V _{CE} =-2V	70		240	
h _{FE-2}	DC current gain	I _C =-2.5A ; V _{CE} =-2V	30			
C _{OB}	Output capacitance	I _E =0 ; V _{CB} =-10V ; f=1MHz		35		pF
f _T	Transition frequency	I _C =-0.5A ; V _{CE} =-2V		100		MHz

◆ h_{FE-1} Classifications

O	Y
70-140	120-240

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PACKAGE OUTLINE

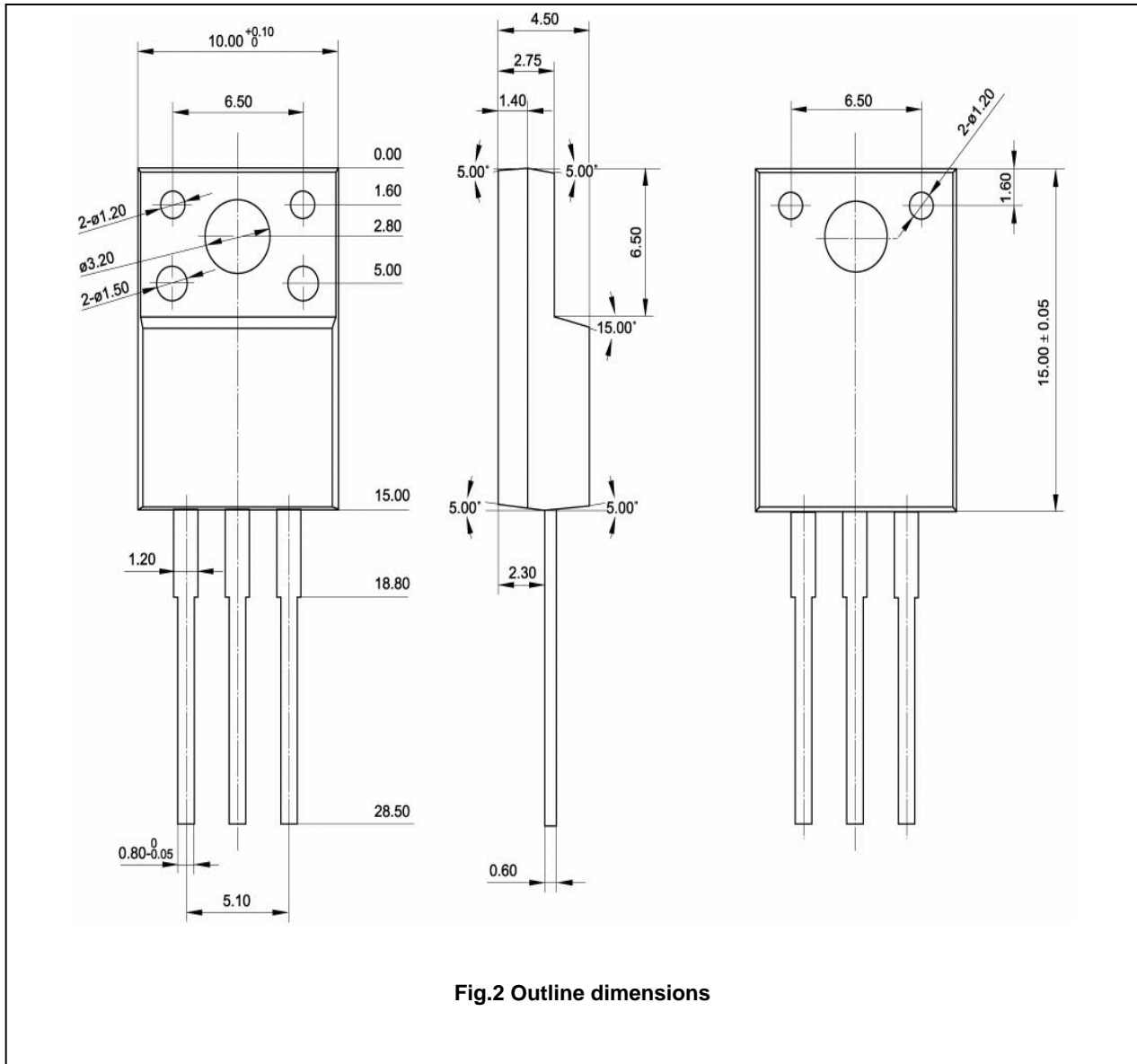


Fig.2 Outline dimensions

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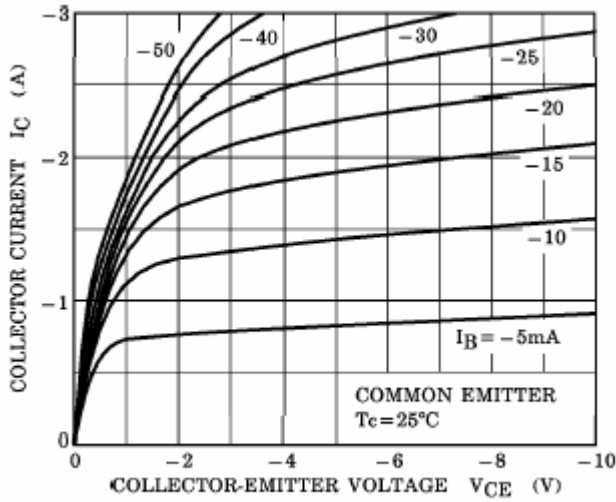


Fig.3 Static Characteristic

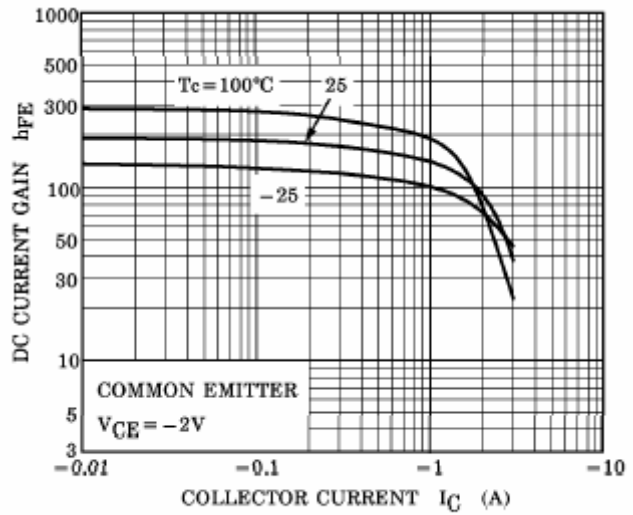


Fig.4 DC current Gain

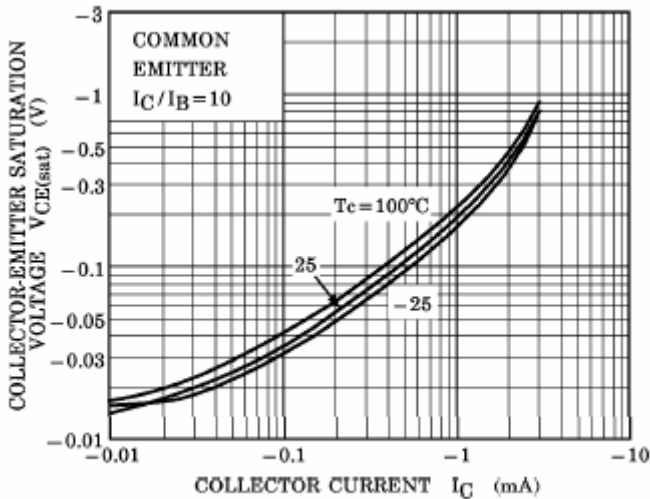


Fig.5 Collector-Emitter Saturation Voltage

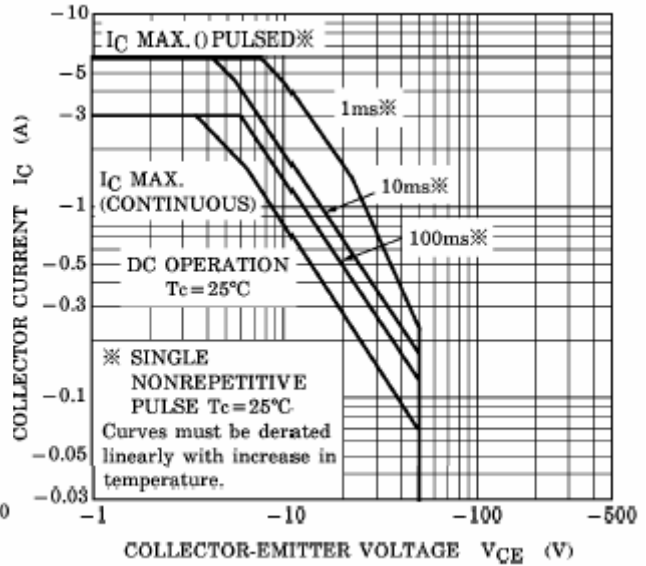


Fig.6 Safe Operating Area