

Silicon NPN Power Transistors

2SC2233

DESCRIPTION

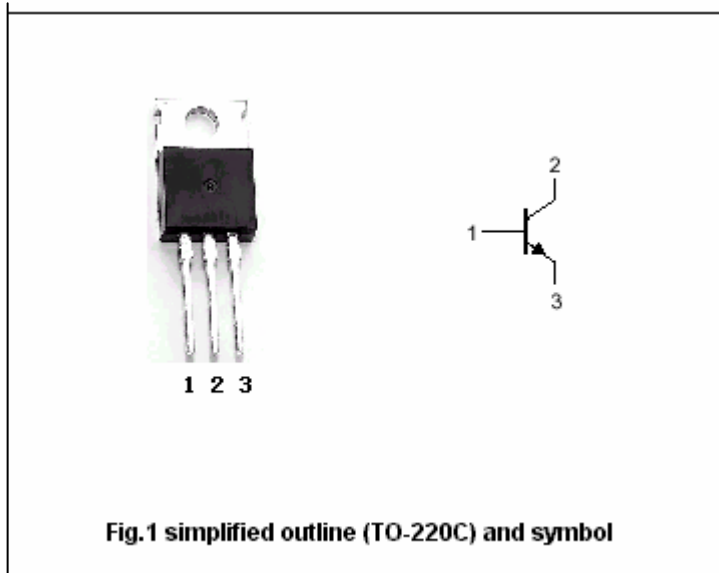
- With TO-220C package
- Large collector current capability
- Large collector power dissipation

APPLICATIONS

- For TV horizontal deflection output applications

PINNING

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



Absolute maximum ratings(Ta=25°C)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V _{CBO}	Collector-base voltage	Open emitter	200	V
V _{CEO}	Collector-emitter voltage	Open base	60	V
V _{EBO}	Emitter-base voltage	Open collector	5	V
I _C	Collector current		4	A
I _{CM}	Collector current-peak		10	A
I _B	Base current		1	A
P _C	Collector dissipation	T _a =25°C	1.5	W
		T _C =25°C	40	
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 =25mA ; I _B =0	60			V
V _{CEsat}	Collector-emitter saturation voltage	I _C =4A ; I _B =0.4A			1.0	V
V _{BEsat}	Base-emitter saturation voltage	I _C =4A ; I _B =0.4A			1.5	V
I _{CBO}	Collector cut-off current	V _{CB} =170V ; I _E =0			10	μA
I _{EBO}	Emitter cut-off current	V _{EB} =5V ; I _C =0			10	μA
h _{FE-1}	DC current gain	I _C =1A ; V _{CE} =5V	30		150	
h _{FE-2}	DC current gain	I _C =4A ; V _{CE} =5V	20			
f _T	Transition frequency	I _C =0.5A ; V _{CE} =5V		8		MHz

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PACKAGE OUTLINE

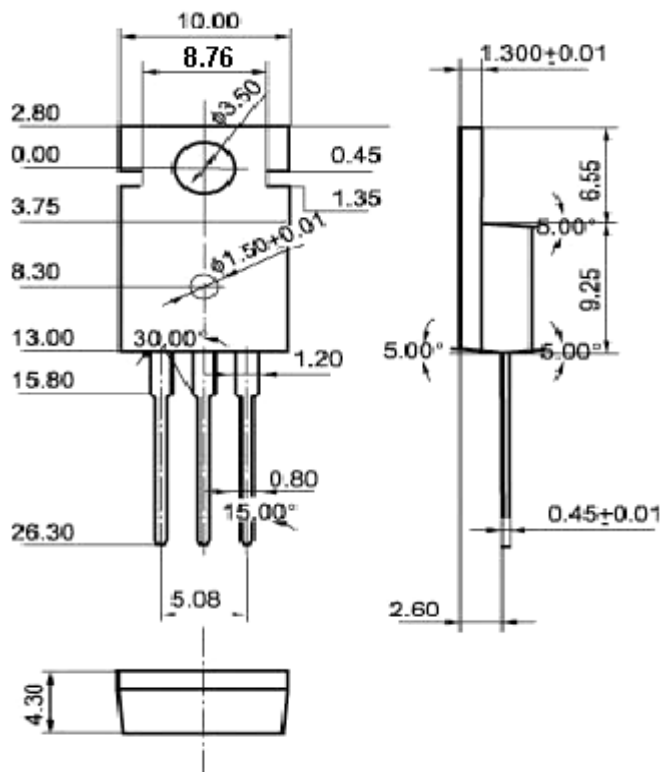


Fig.2 Outline dimensions (unindicated tolerance: ± 0.10 mm)

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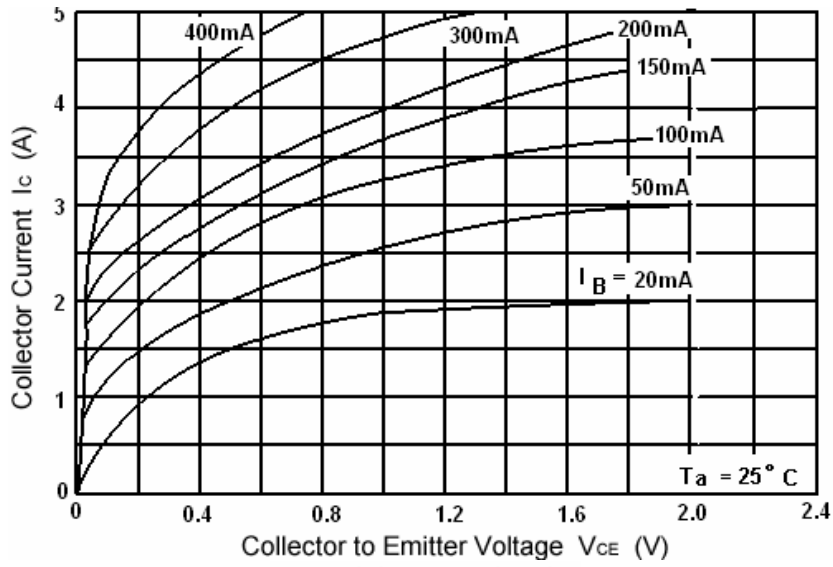


Fig.3 Static Characteristic

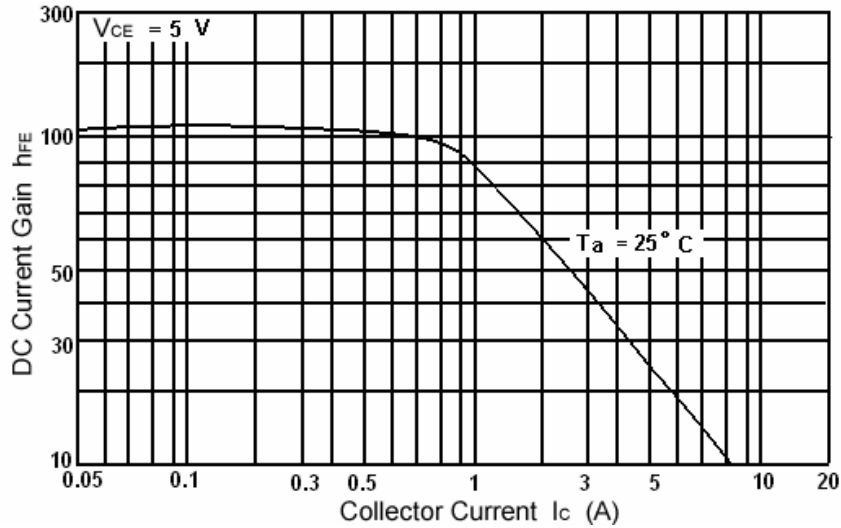


Fig.4 DC current Gain

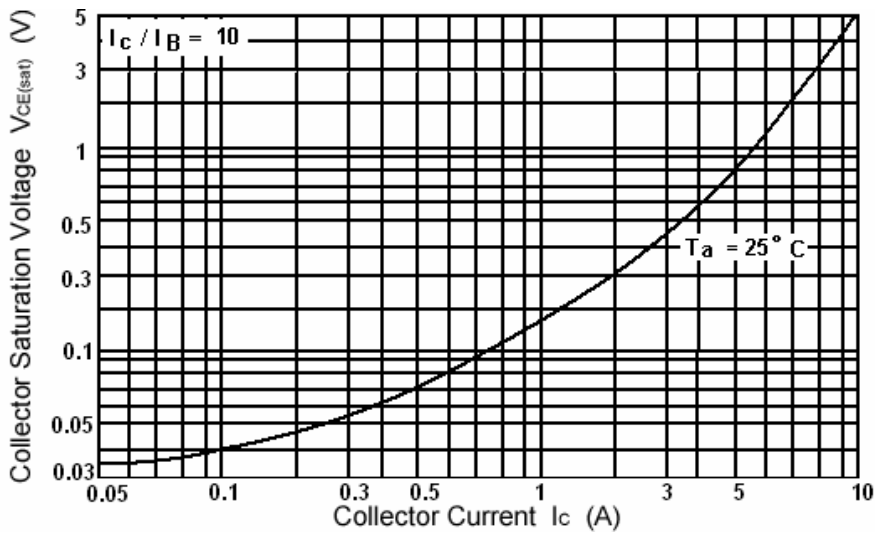


Fig.5 Collector-Emitter Saturation Voltage

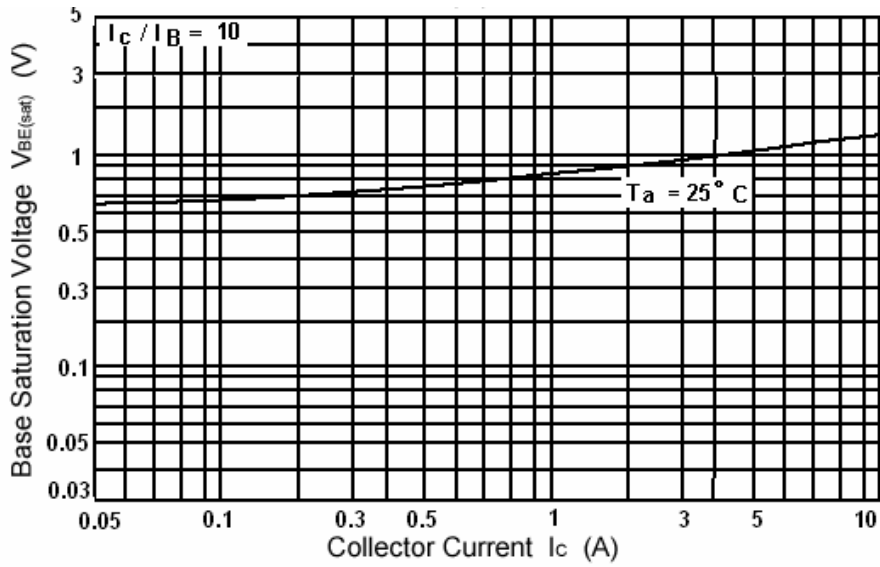


Fig.6 Base-Emitter Saturation Voltage

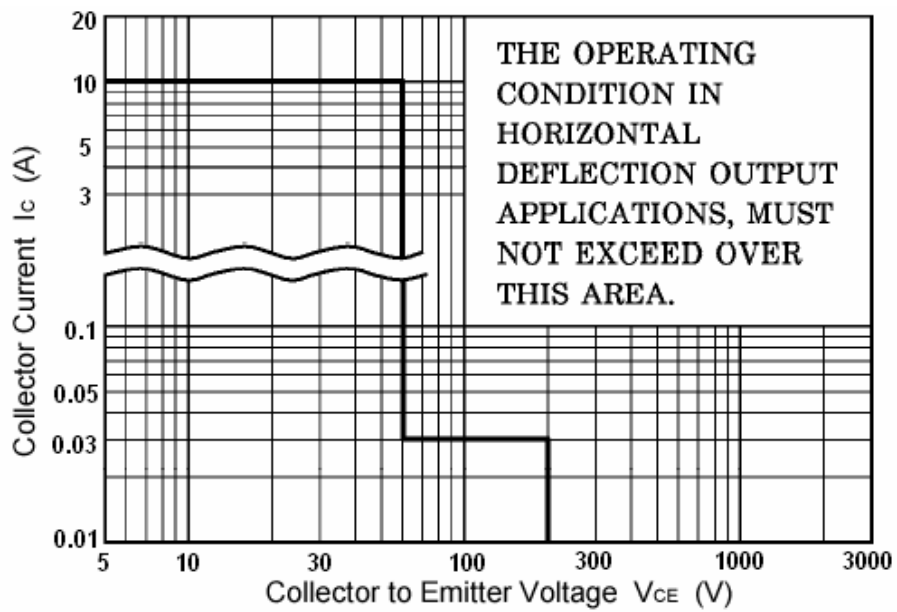


Fig.7 Safe Operating Area