

Silicon NPN Power Transistors

2SC2336 2SC2336A 2SC2336B

DESCRIPTION

- With TO-220 package
- Complement to type 2SA1006, 2SA1006A,2SA1006B

APPLICATIONS

- Audio frequency power amplifier
- High frequency power amplifier

PINNING

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

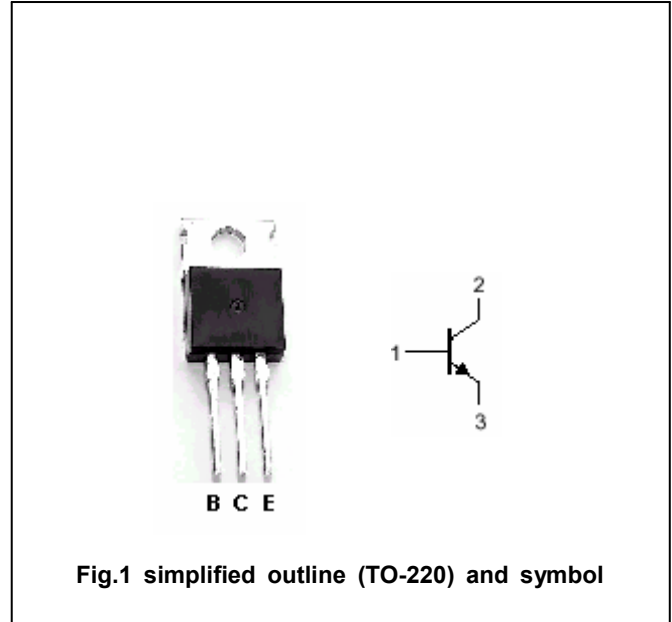


Fig.1 simplified outline (TO-220) and symbol

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

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	2SC2336	180	V
		2SC2336A	200	
		2SC2336B	250	
V_{CEO}	Collector-emitter voltage	2SC2336	180	V
		2SC2336A	200	
		2SC2336B	250	
V_{EBO}	Emitter-base voltage	Open collector	5	V
I_C	Collector current		1.5	A
I_{CM}	Collector current-peak		3.0	A
P_T	Total power dissipation	$T_a=25^\circ\text{C}$	1.5	W
		$T_c=25^\circ\text{C}$	25	
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 _{CE(sat)}	Collector-emitter saturation voltage	I _C =0.5A; I _B =50mA			1.0	V
V _{BE(sat)}	Base-emitter saturation voltage	I _C =0.5A; I _B =50mA			1.5	V
I _{CBO}	Collector cut-off current	V _{CB} =150V; I _E =0			1	μA
I _{EBO}	Emitter cut-off current	V _{EB} =3V; I _C =0			1	μA
h _{FE-1}	DC current gain	I _C =5mA; V _{CE} =5V	30			
h _{FE-2}	DC current gain	I _C =150mA; V _{CE} =5V	60		320	
C _{ob}	Output capacitance	I _E =0; V _{CB} =10V, f=1MHz		30		pF
f _T	Transition frequency	I _C =100mA; V _{CE} =10V		95		MHz

◆ h_{FE-2} Classifications

R	Q	P
60-120	100-200	160-320

PACKAGE OUTLINE

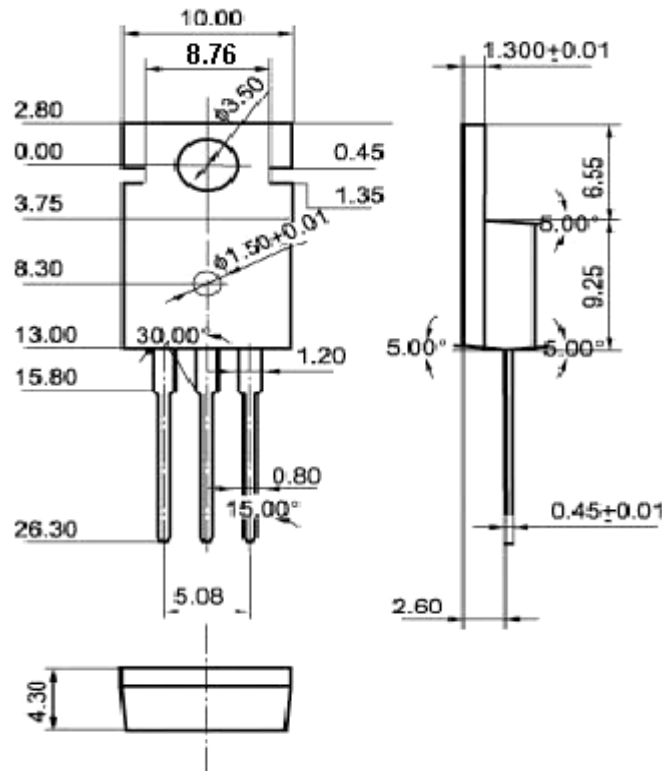


Fig.2 Outline dimensions(unindicated tolerance: ± 0.10 mm)

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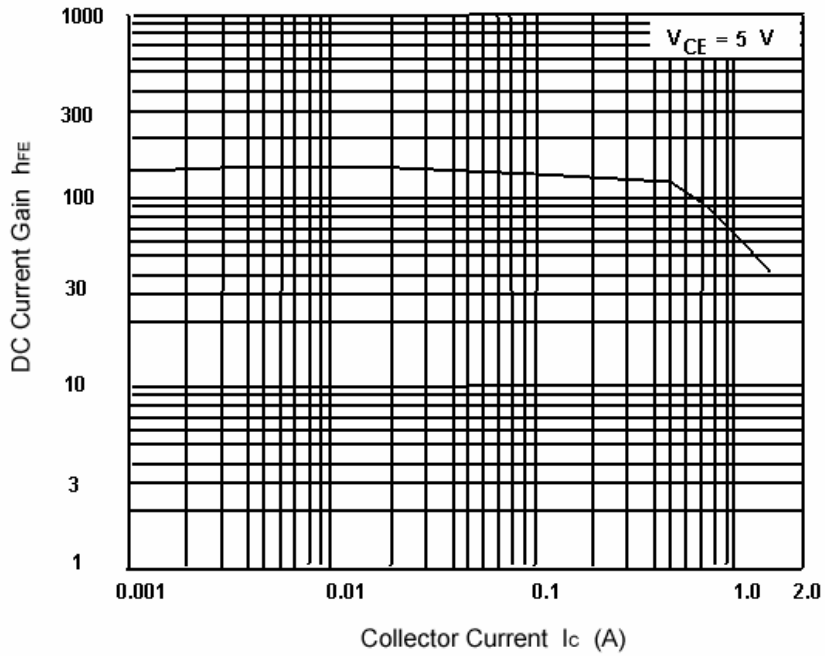


Fig.3 DC current Gain

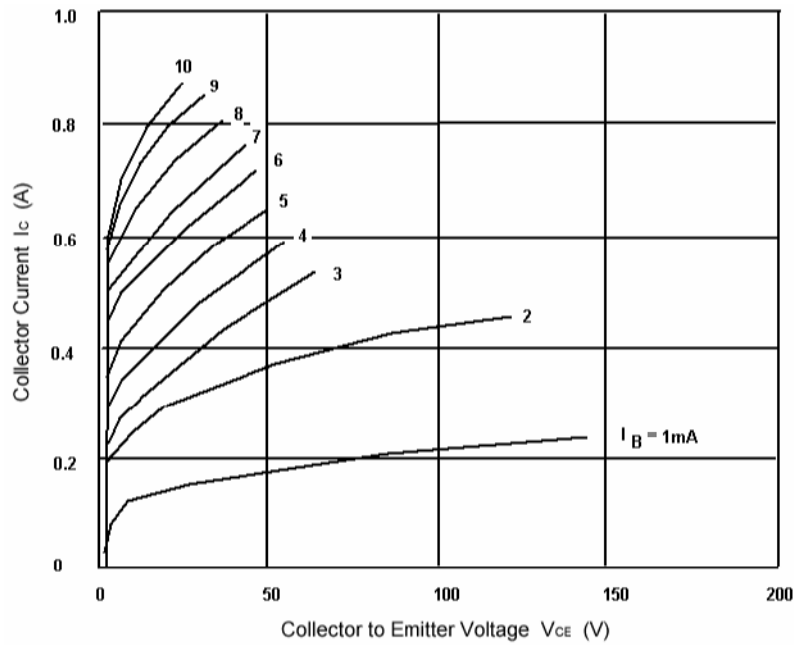


Fig.4 Static Characteristic

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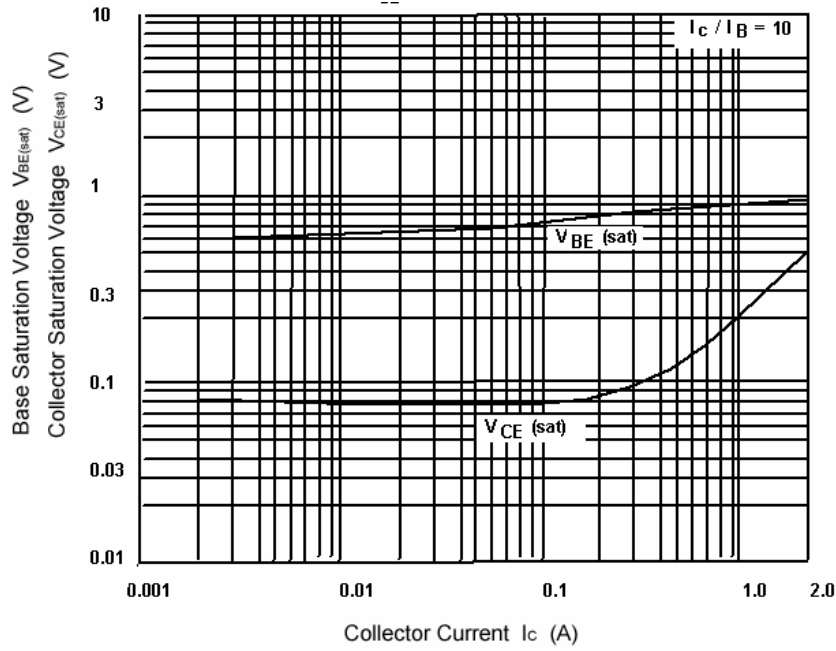


Fig.5 Base-Emitter Saturation Voltage
Collector-Emmitter Saturation Voltage

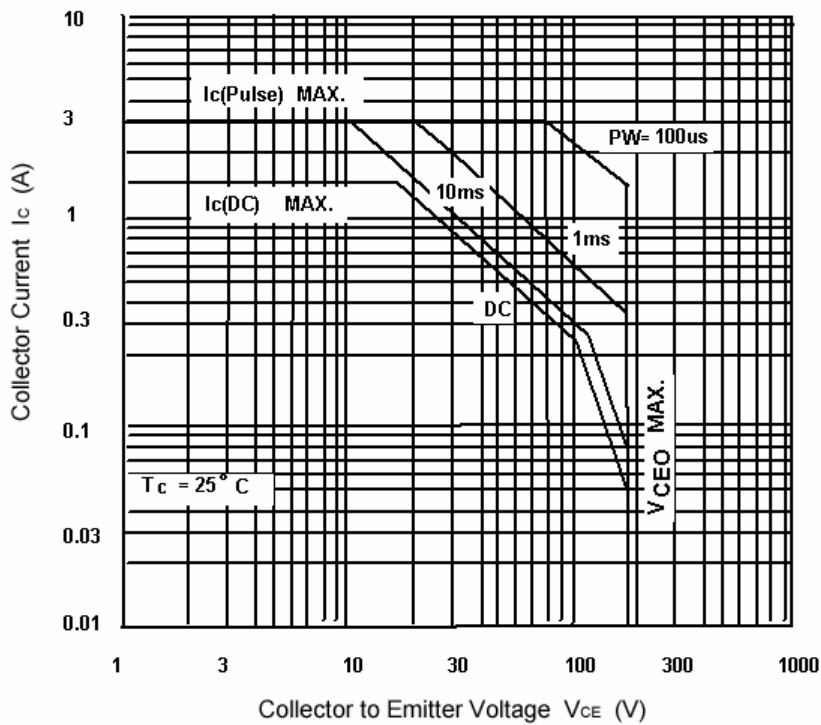


Fig.6 Safe Operating Area