

Silicon NPN Power Transistors

2SC3296

DESCRIPTION

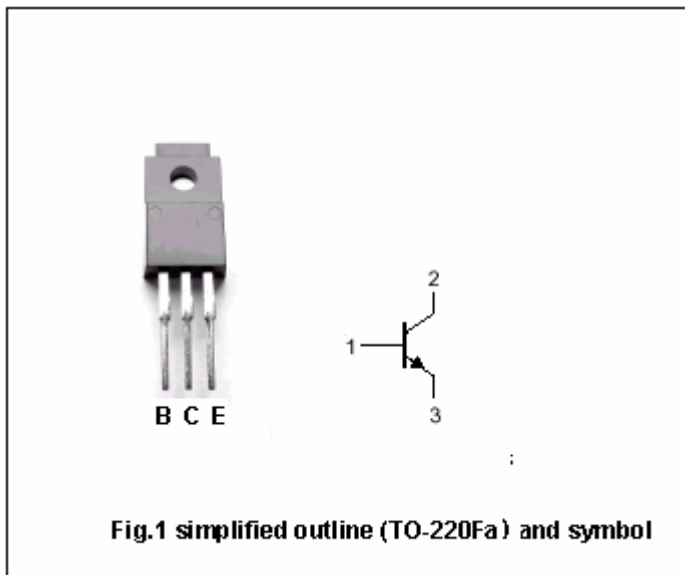
- With TO-220Fa package
- Wide area of safe operation
- Complement to type 2SA1304

APPLICATIONS

- Power amplifier applications
- Vertical output 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	150	V
V _{CEO}	Collector-emitter voltage	Open base	150	V
V _{EBO}	Emitter-base voltage	Open collector	5	V
I _C	Collector current		1.5	A
I _B	Base current		0.5	A
P _C	Collector power dissipation	T _a =25°C	2	W
		T _C =25°C	20	
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	150			V
V _{CEsat}	Collector-emitter saturation voltage	I _C =0.5A ; I _B =50mA			1.5	V
V _{BE}	Base-emitter on voltage	I _C =0.5A ; V _{CE} =10V			0.85	V
I _{CBO}	Collector cut-off current	V _{CB} =120V; I _E =0			10	μA
I _{EBO}	Emitter cut-off current	V _{EB} =5V; I _C =0			10	μA
h _{FE}	DC current gain	I _C =0.5A ; V _{CE} =10V	40		140	
C _{OB}	Output capacitance	I _E =0 ; V _{CB} =10V;f=1MHz		35		pF
f _T	Transition frequency	I _C =0.5A ; V _{CE} =10V		4		MHz

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PACKAGE OUTLINE

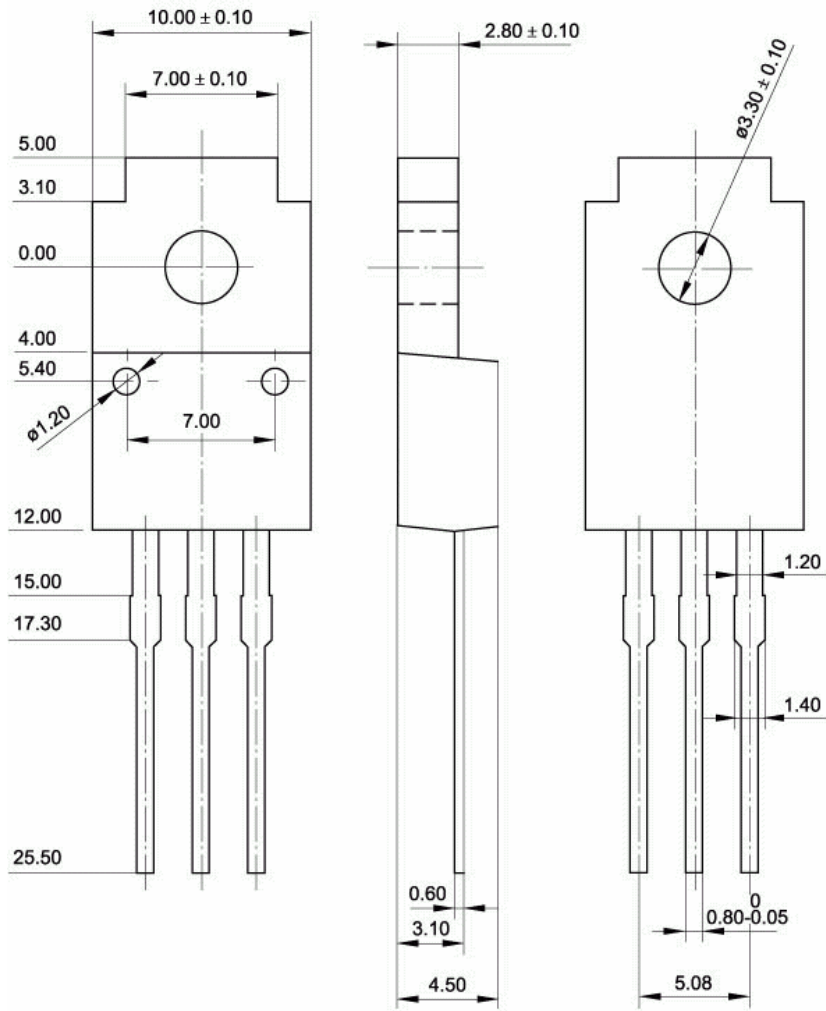


Fig.2 Outline dimensions (unindicated tolerance: ± 0.15 mm)

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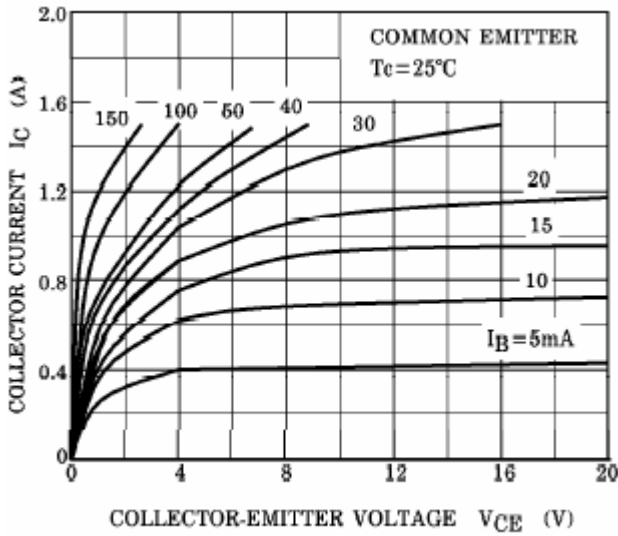


Fig.3 Static Characteristic

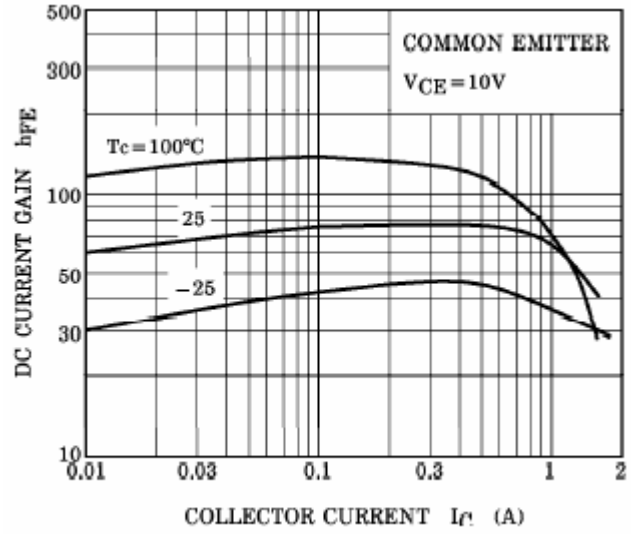


Fig.4 DC current Gain

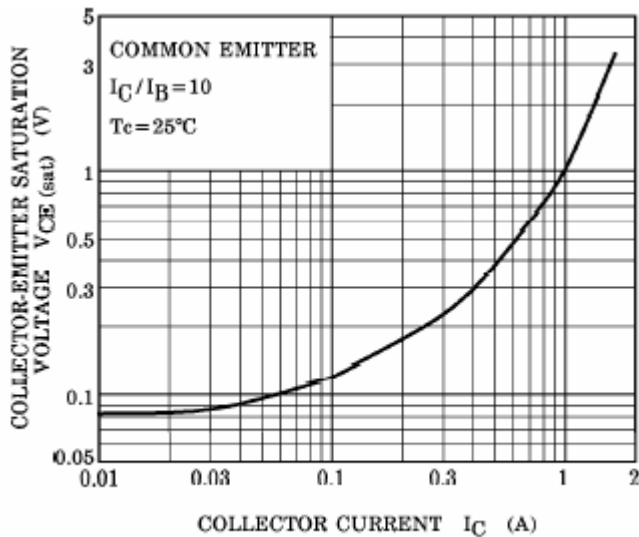


Fig.5 Collector-Emitter Saturation Voltage

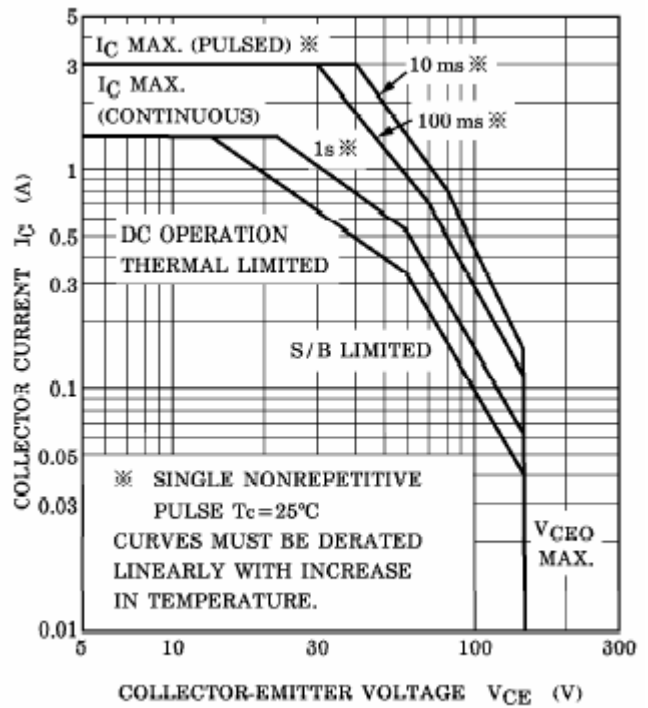


Fig.6 Safe Operating Area