

Silicon PNP Power Transistors

2SA1304

DESCRIPTION

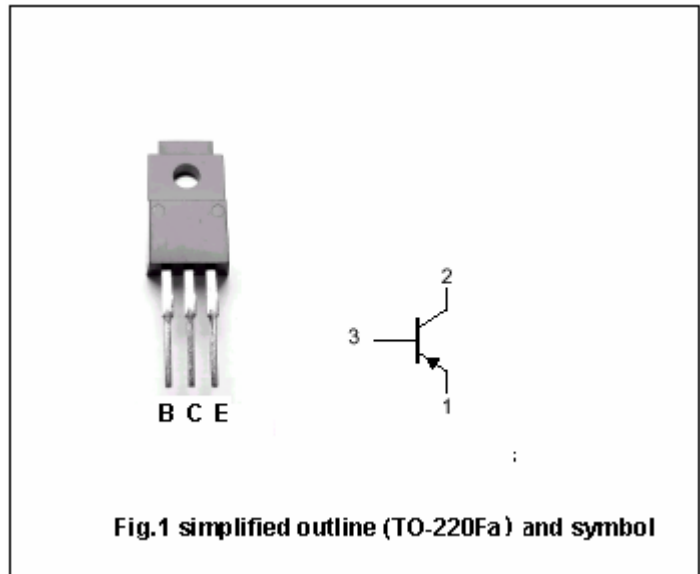
- With TO-220Fa package
- Complement to type 2SC3296
- High breakdown voltage

APPLICATIONS

- Power amplifier applications
- Vertical output applicatios

PINNING

PIN	DESCRIPTION
1	Emitter
2	Collector
3	Base

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

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	Open emitter	-150	V
V_{CEO}	Collector-emitter voltage	Open base	-150	
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	$T_c=25^\circ\text{C}$	20	W
		$T_a=25^\circ\text{C}$	2	
T_j	Junction temperature		150	$^\circ\text{C}$
T_{stg}	Storage temperature		-55~150	$^\circ\text{C}$

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CHARACTERISTICS

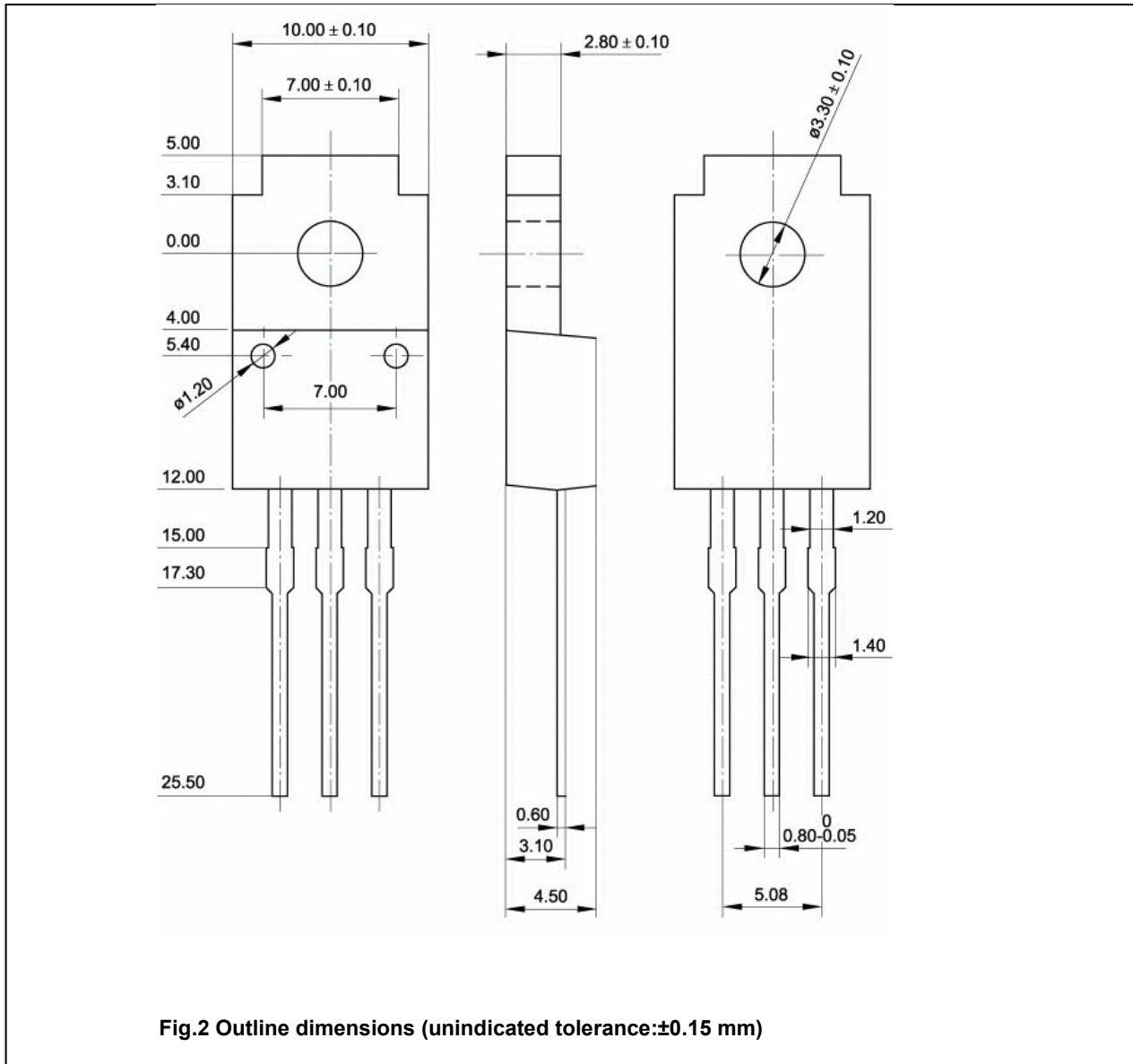
Tj=25°C unless otherwise specified

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	$I_C=-500mA; I_B=-50mA$			-1.5	V
V_{BE}	Base-emitter on voltage	$I_C=-500mA; V_{CE}=-10V$			-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	$I_C=-500mA; V_{CE}=-10V$	40		140	
C_{ob}	Output capacitance	$I_E=0; V_{CB}=-10V, f=1MHz$		55		pF
f_T	Transition frequency	$I_C=-500mA; V_{CE}=-10V$		4		MHz

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PACKAGE OUTLINE



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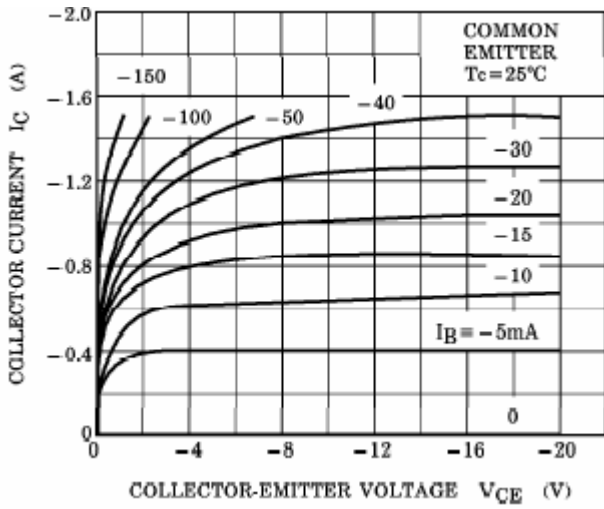


Fig.3 Static Characteristic

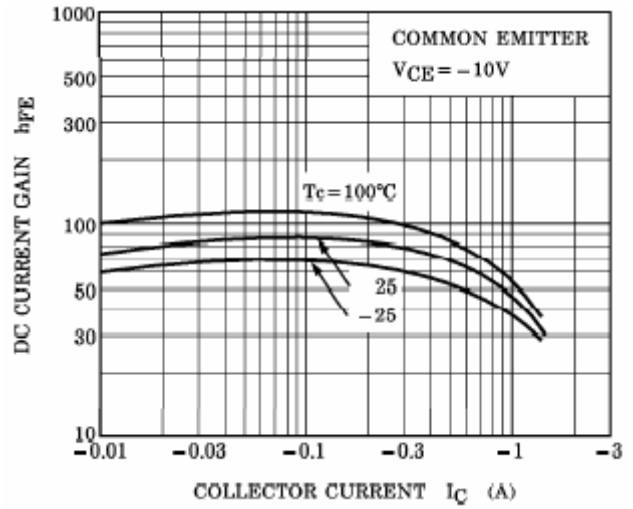


Fig.4 DC current Gain

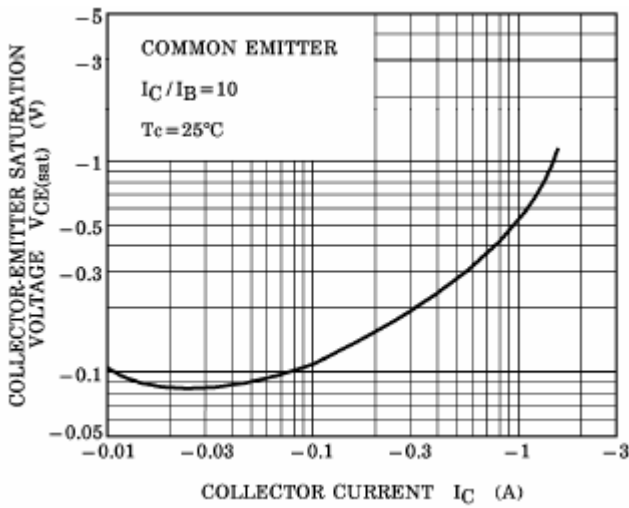


Fig.5 Collector-Emitter Saturation Voltage

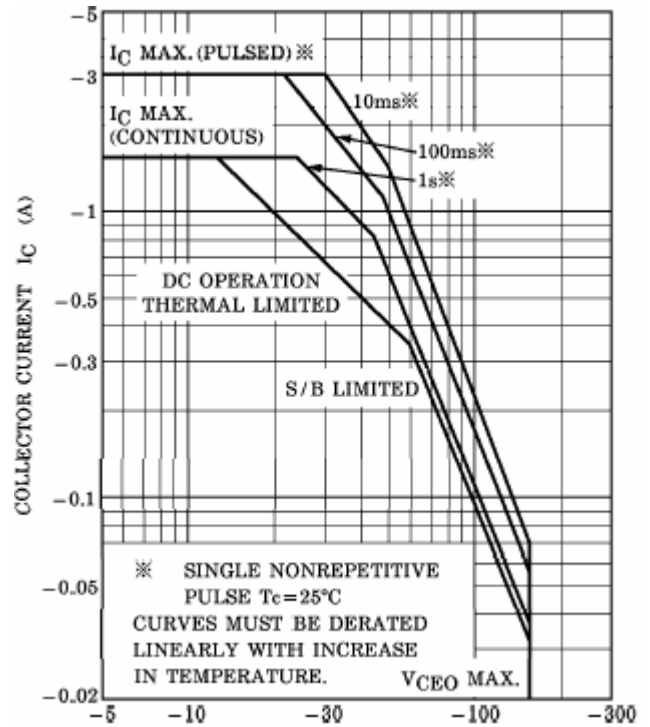


Fig.6 Safe Operating Area