

Silicon PNP Power Transistors

2SA1304

DESCRIPTION

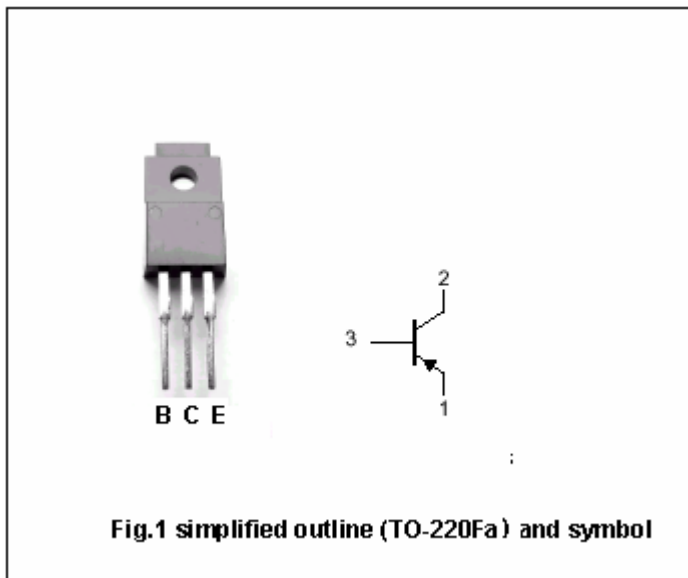
- With TO-220Fa package
- Complement to type 2SC3296
- High breakdown voltage

APPLICATIONS

- Power amplifier applications
- Vertical output applicatios

PINNING

PIN	DESCRIPTION
1	Emitter
2	Collector
3	Base



Absolute maximum ratings(Tc=25□)

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	$T_C=25□$	20	W
		$T_a=25□$	2	
$T_j$	Junction temperature		150	□
$T_{stg}$	Storage temperature		-55~150	□

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## CHARACTERISTICS

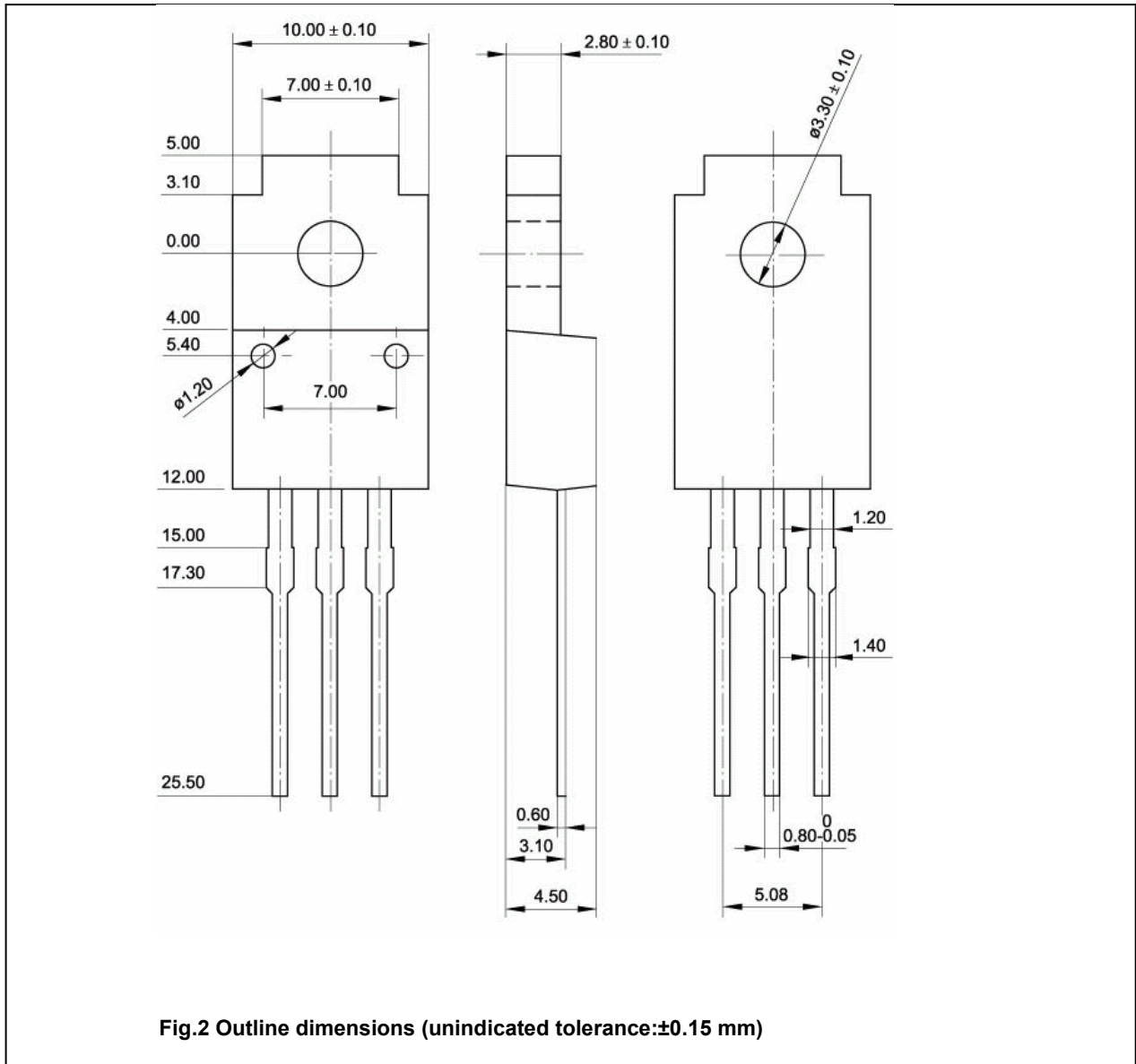
T<sub>j</sub>=25 °C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V <sub>(BR)CEO</sub>	Collector-emitter breakdown voltage	I <sub>C</sub> =-10mA , I <sub>B</sub> =0	-150			V
V <sub>CEsat</sub>	Collector-emitter saturation voltage	I <sub>C</sub> =-500mA; I <sub>B</sub> =-50mA			-1.5	V
V <sub>BE</sub>	Base-emitter on voltage	I <sub>C</sub> =-500mA ; V <sub>CE</sub> =-10V			-0.85	V
I <sub>CBO</sub>	Collector cut-off current	V <sub>CB</sub> =-120V; I <sub>E</sub> =0			-10	μA
I <sub>EBO</sub>	Emitter cut-off current	V <sub>EB</sub> =-5V; I <sub>C</sub> =0			-10	μA
h <sub>FE</sub>	DC current gain	I <sub>C</sub> =-500mA ; V <sub>CE</sub> =-10V	40		140	
C <sub>ob</sub>	Output capacitance	I <sub>E</sub> =0; V <sub>CB</sub> =-10V, f=1MHz		55		pF
f <sub>T</sub>	Transition frequency	I <sub>C</sub> =-500mA ; V <sub>CE</sub> =-10V		4		MHz

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PACKAGE OUTLINE



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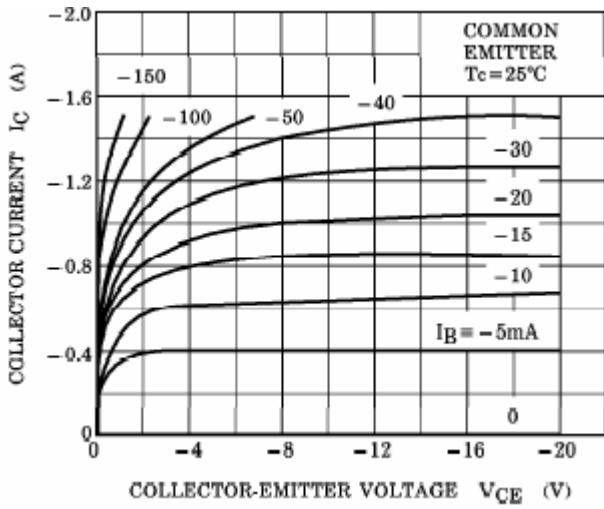


Fig.3 Static Characteristic

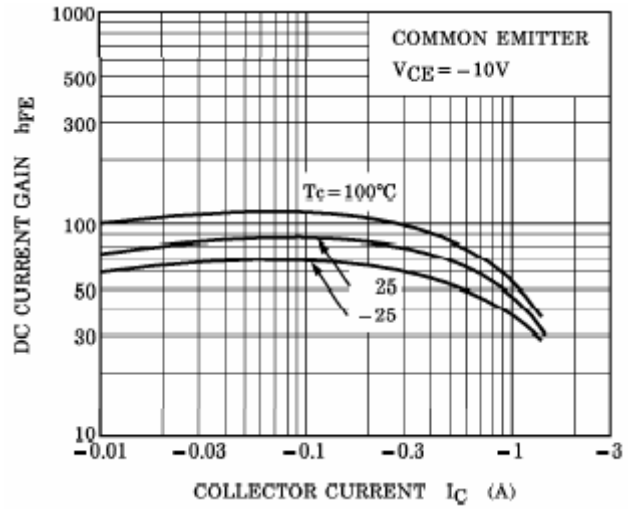


Fig.4 DC current Gain

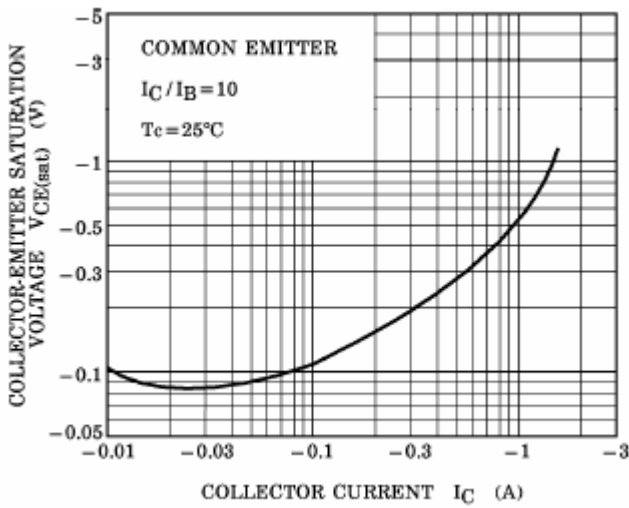


Fig.5 Collector-Emitter Saturation Voltage

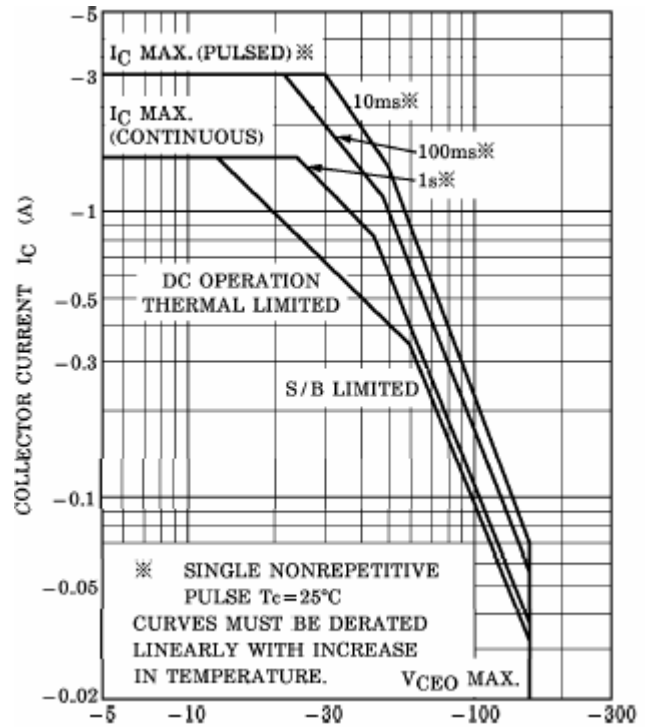


Fig.6 Safe Operating Area