

## Silicon PNP Power Transistors

2SA1276

## DESCRIPTION

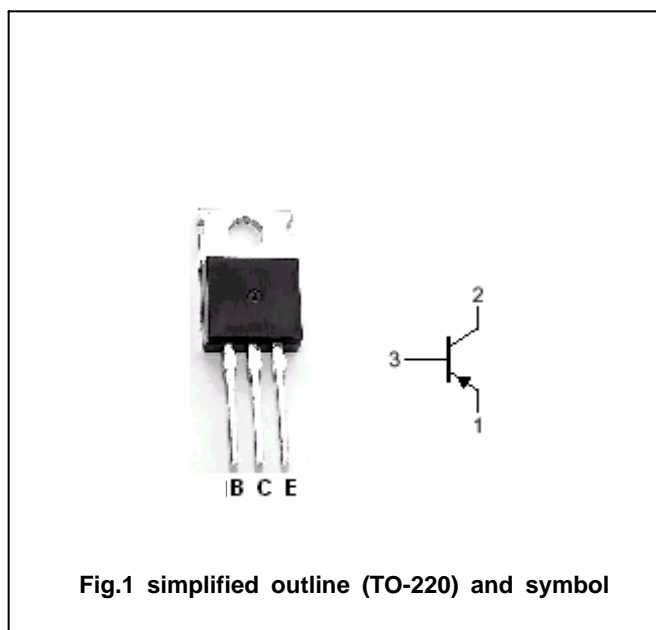
- With TO-220 package
- Complement to type 2SC3230
- Good linearity of  $h_{FE}$

## APPLICATIONS

- General purpose applications

## PINNING

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

Absolute maximum ratings( $T_a=25$  )

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
$V_{CBO}$	Collector-base voltage	Open emitter	-30	V
$V_{CEO}$	Collector-emitter voltage	Open base	-30	V
$V_{EBO}$	Emitter-base voltage	Open collector	-5	V
$I_C$	Collector current		-3	A
$I_E$	Emitter current		3	A
$P_C$	Collector power dissipation	$T_C=25$	10	W
$T_j$	Junction temperature		150	
$T_{stg}$	Storage temperature		-55~150	

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## CHARACTERISTICS

T<sub>j</sub>=25 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	-30			V
V <sub>(BR)EBO</sub>	Emitter-base breakdown voltage	I <sub>E</sub> =-1mA, I <sub>C</sub> =0	-5			V
V <sub>CEsat</sub>	Collector-emitter saturation voltage	I <sub>C</sub> =-2A; I <sub>B</sub> =-0.2A		-0.3	-0.8	V
V <sub>BE</sub>	Base-emitter voltage	I <sub>C</sub> =-0.5A; V <sub>CE</sub> =-2V		-0.75	-1.0	V
I <sub>CBO</sub>	Collector cut-off current	V <sub>CB</sub> =-20V; I <sub>E</sub> =0			-1.0	μA
I <sub>EBO</sub>	Emitter cut-off current	V <sub>EB</sub> =-5V; I <sub>C</sub> =0			-1.0	μA
h <sub>FE-1</sub>	DC current gain	I <sub>C</sub> =-0.5A; V <sub>CE</sub> =-2V	70		240	
h <sub>FE-2</sub>	DC current gain	I <sub>C</sub> =-2.5A; V <sub>CE</sub> =-2V	25			
f <sub>T</sub>	Transition frequency	I <sub>C</sub> =-0.5A; V <sub>CE</sub> =-2V		100		MHz
C <sub>ob</sub>	Output capacitance	I <sub>E</sub> =0; V <sub>CB</sub> =10V; f=1MHz		40		pF

◆ h<sub>FE-1</sub> Classifications

O	Y
70-140	120-240



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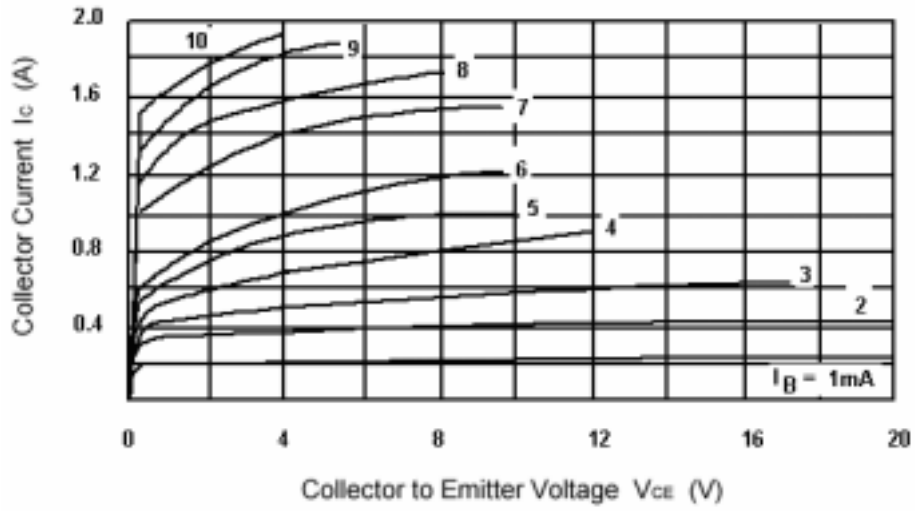


Fig.3 Static Characteristic

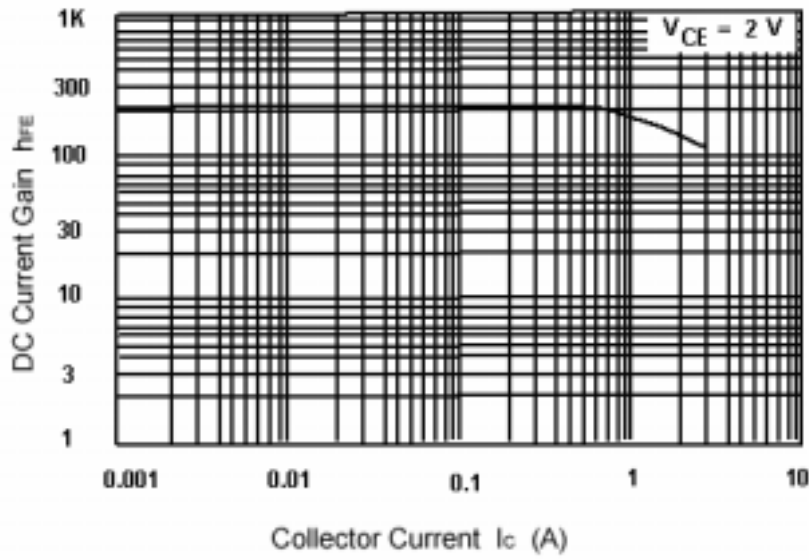


Fig.4 DC current Gain

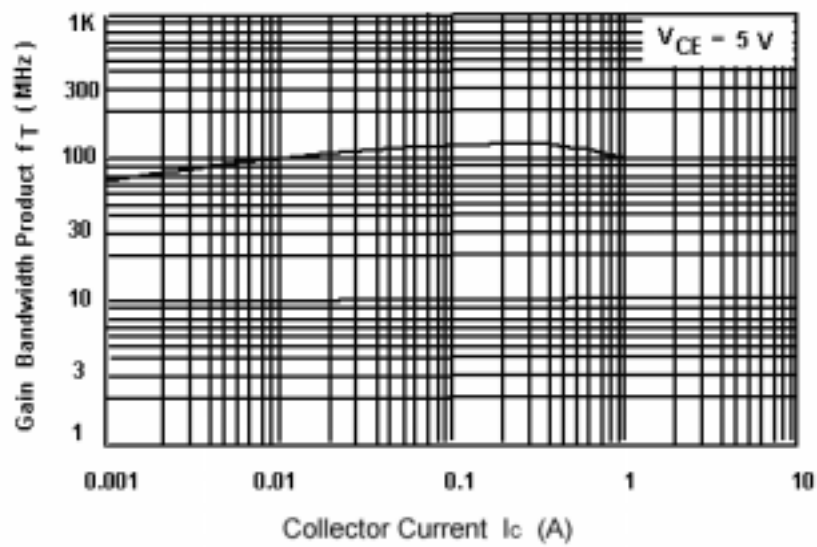


Fig.5  $f_T - I_C$

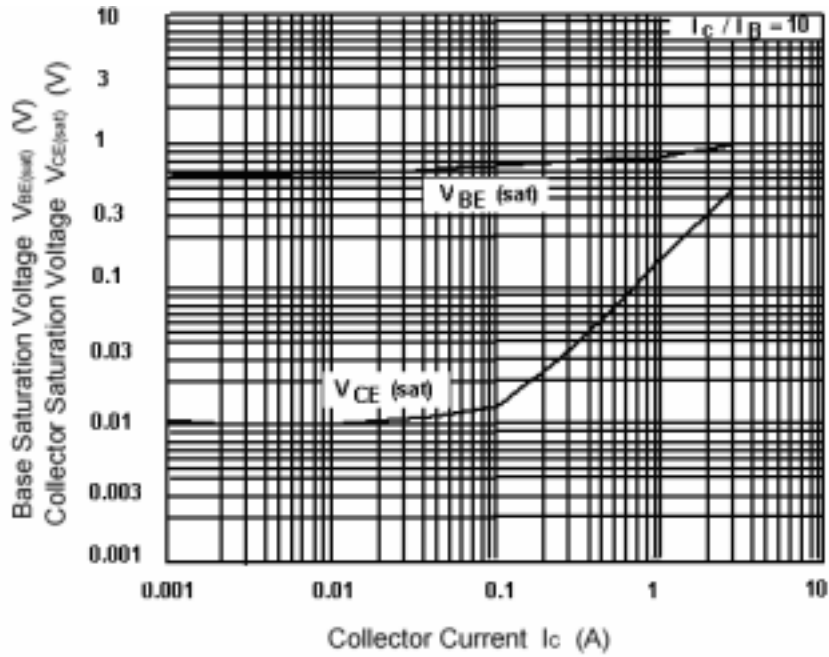


Fig.6 Base-Emitter Saturation Voltage  
Collector-Emitter Saturation Voltage

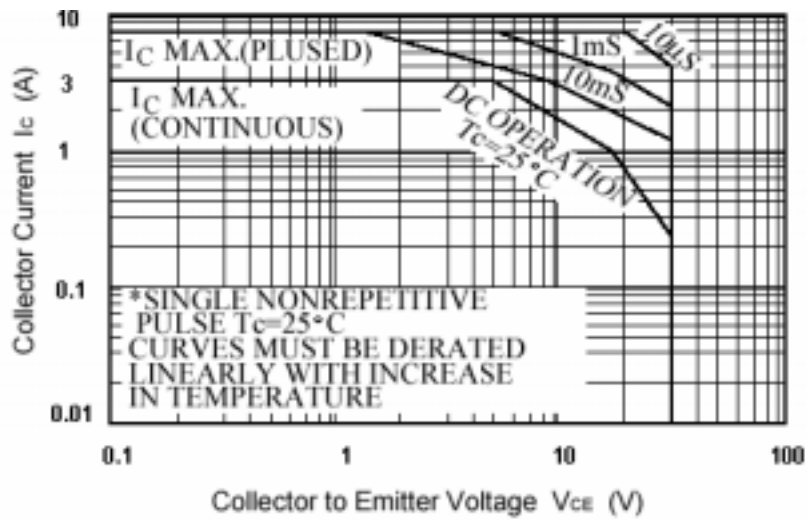


Fig.7 Safe Operating Area