

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

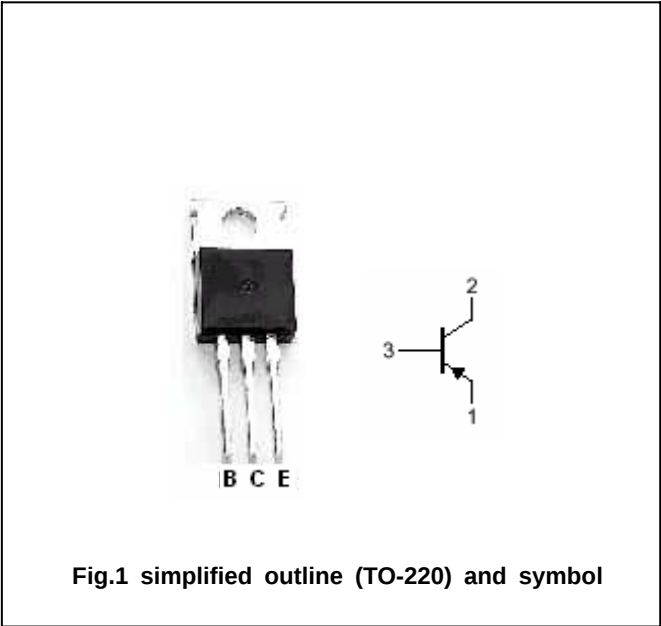


Fig.1 simplified outline (TO-220) and symbol

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

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	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	$T_C=25^{\circ}\text{C}$	10	W
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 _{(BR)CEO}	Collector-emitter breakdown voltage	I _C =-10mA, I _B =0	-30			V
V _{(BR)EBO}	Emitter-base breakdown voltage	I _E =-1mA, I _C =0	-5			V
V _{CEsat}	Collector-emitter saturation voltage	I _C =-2A; I _B =-0.2A		-0.3	-0.8	V
V _{BE}	Base-emitter voltage	I _C =-0.5A; V _{CE} =-2V		-0.75	-1.0	V
I _{CBO}	Collector cut-off current	V _{CB} =-20V; I _E =0			-1.0	μ A
I _{EBO}	Emitter cut-off current	V _{EB} =-5V; I _C =0			-1.0	μ A
h _{FE-1}	DC current gain	I _C =-0.5A; V _{CE} =-2V	70		240	
h _{FE-2}	DC current gain	I _C =-2.5A; V _{CE} =-2V	25			
f _T	Transition frequency	I _C =-0.5A; V _{CE} =-2V		100		MHz
C _{ob}	Output capacitance	I _E =0; V _{CB} =10V; f=1MHz		40		pF

◆ h_{FE-1} Classifications

O	Y
70-140	120-240

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PACKAGE OUTLINE

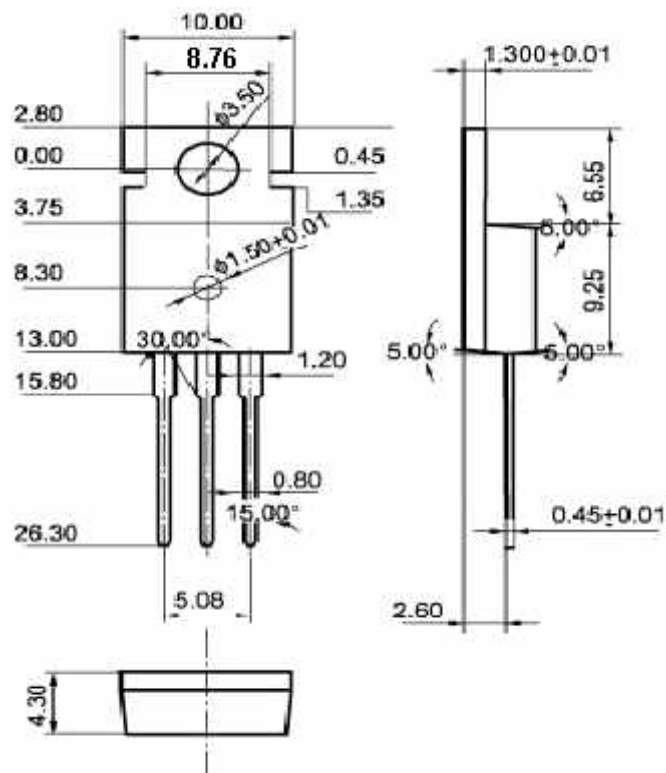


Fig.2 Outline dimensions(unindicated tolerance:±0.10 mm)

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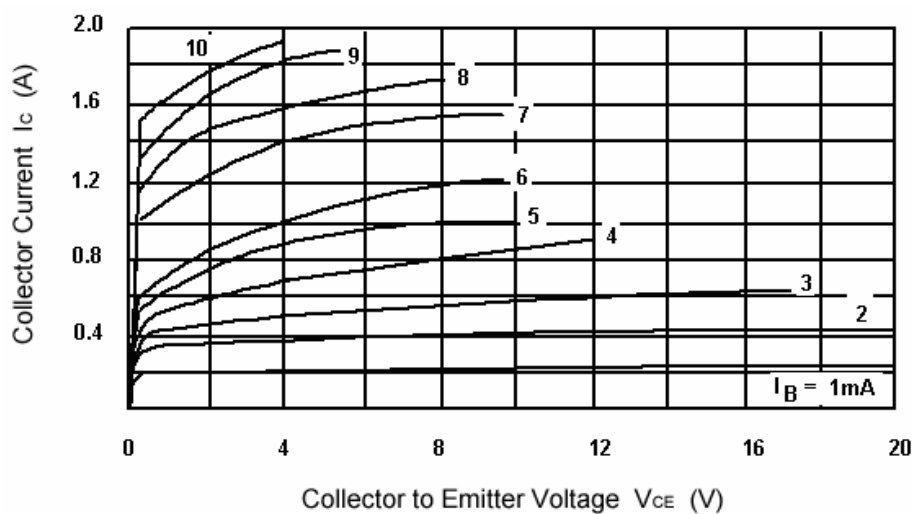


Fig.3 Static Characteristic

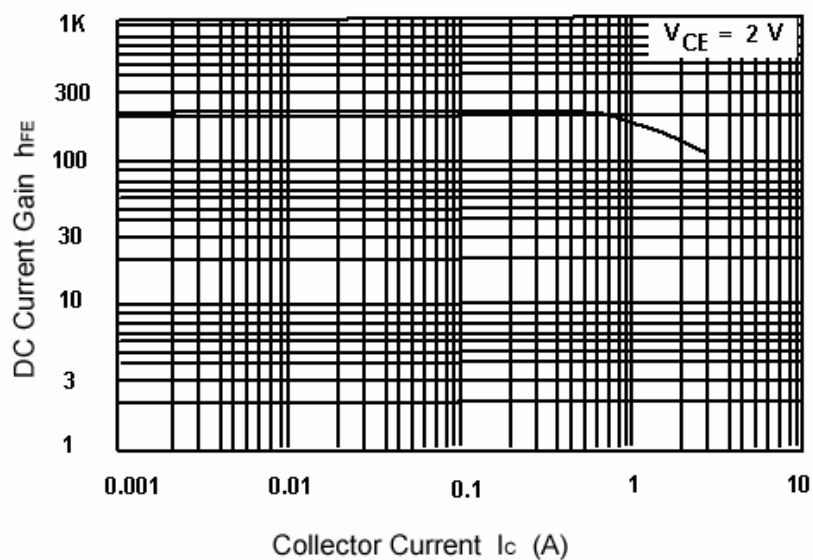
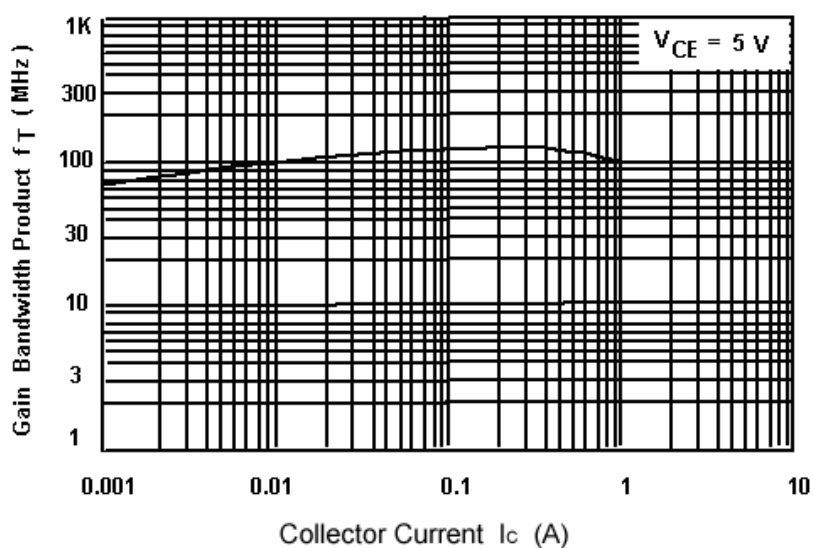


Fig.4 DC current Gain

Fig.5 $f_T - I_C$

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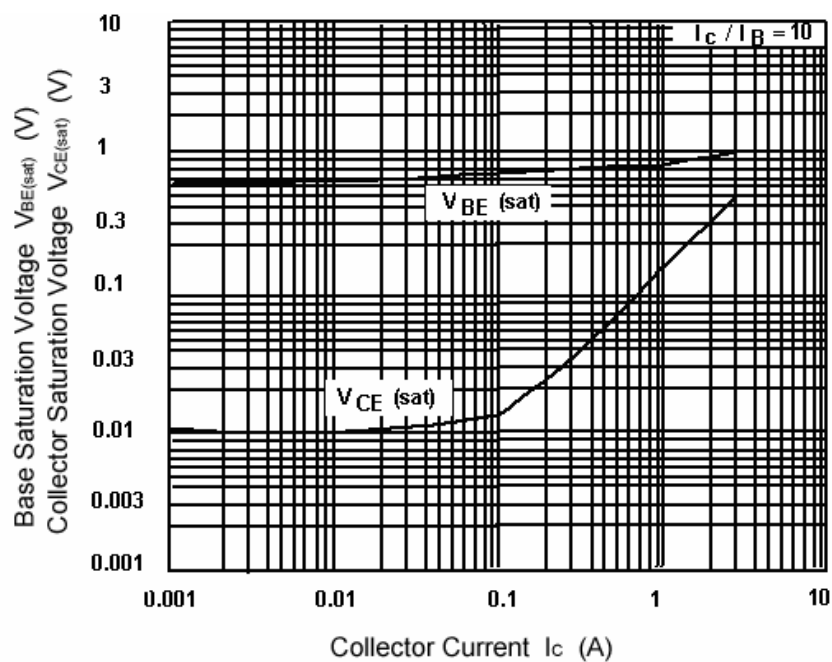


Fig.6 Base-Emitter Saturation Voltage
Collector-Emitter Saturation Voltage

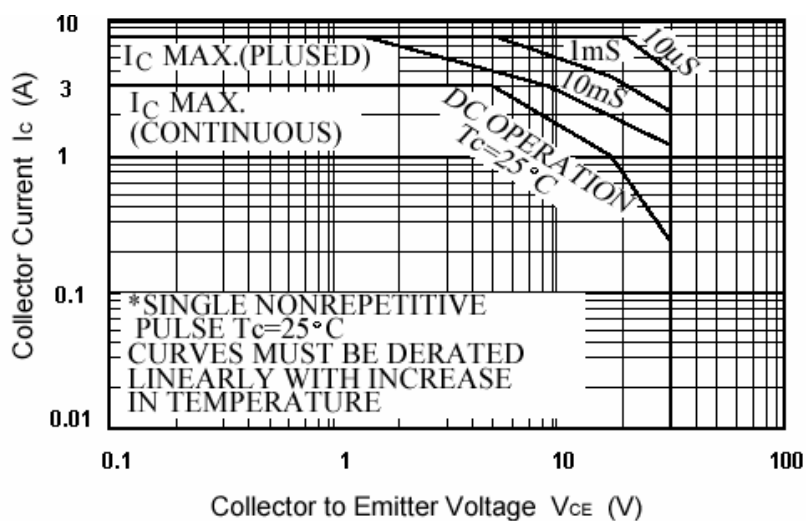


Fig.7 Safe Operating Area