

**Silicon PNP Power Transistors**

**2SA1327**

**DESCRIPTION**

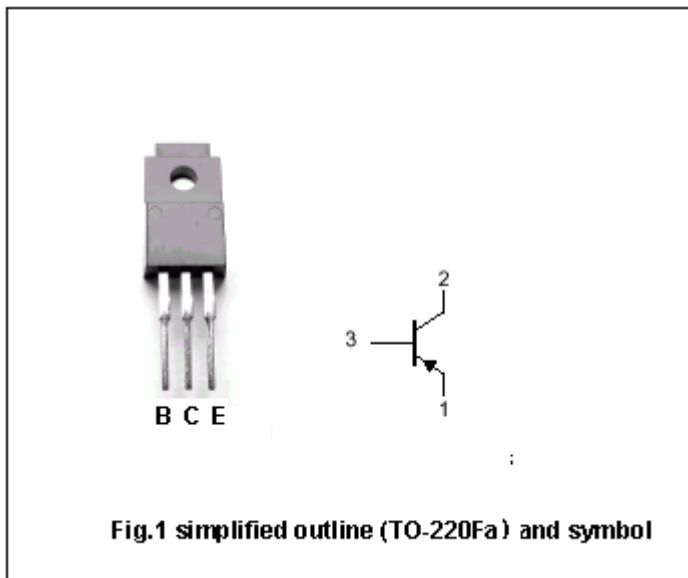
- With TO-220Fa package
- Low collector saturation voltage
- High current capacity

**APPLICATIONS**

- Strobe flash applications
- Audio power amplifier applications

**PINNING**

PIN	DESCRIPTION
1	Emitter
2	Collector
3	Base



**Absolute maximum ratings (Ta=25°C)**

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V <sub>CBO</sub>	Collector-base voltage	Open emitter	-50	V
V <sub>CEO</sub>	Collector-emitter voltage	Open base	-20	V
V <sub>EBO</sub>	Emitter-base voltage	Open collector	-8	V
I <sub>C</sub>	Collector current		-10	A
I <sub>CM</sub>	Collector current-peak		-20	A
I <sub>B</sub>	Base current		-2	A
P <sub>C</sub>	Collector power dissipation	T <sub>C</sub> =25°C	20	W
		T <sub>a</sub> =25°C	2	
T <sub>j</sub>	Junction temperature		150	°C
T <sub>stg</sub>	Storage temperature		-55~150	°C

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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	-20			V
V <sub>CEsat</sub>	Collector-emitter saturation voltage	I <sub>C</sub> =-8A; I <sub>B</sub> =-0.4A			-0.5	V
V <sub>BE</sub>	Base-emitter on voltage	I <sub>C</sub> =-8A; V <sub>CE</sub> =-2V			-1.5	V
I <sub>CBO</sub>	Collector cut-off current	V <sub>CB</sub> =-50V; I <sub>E</sub> =0			-1.0	μA
I <sub>EBO</sub>	Emitter cut-off current	V <sub>EB</sub> =-8V; I <sub>C</sub> =0			-1.0	μA
h <sub>FE-1</sub>	DC current gain	I <sub>C</sub> =-1A; V <sub>CE</sub> =-2V	100		320	
h <sub>FE-2</sub>	DC current gain	I <sub>C</sub> =-8A; V <sub>CE</sub> =-2V	70			
C <sub>OB</sub>	Output capacitance	I <sub>E</sub> =0; V <sub>CB</sub> =-10V; f=1MHz		400		pF
f <sub>T</sub>	Transition frequency	I <sub>C</sub> =-1A; V <sub>CE</sub> =-2V		45		MHz

◆ h<sub>FE-1</sub> Classifications

O	Y
100-200	160-320

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PACKAGE OUTLINE

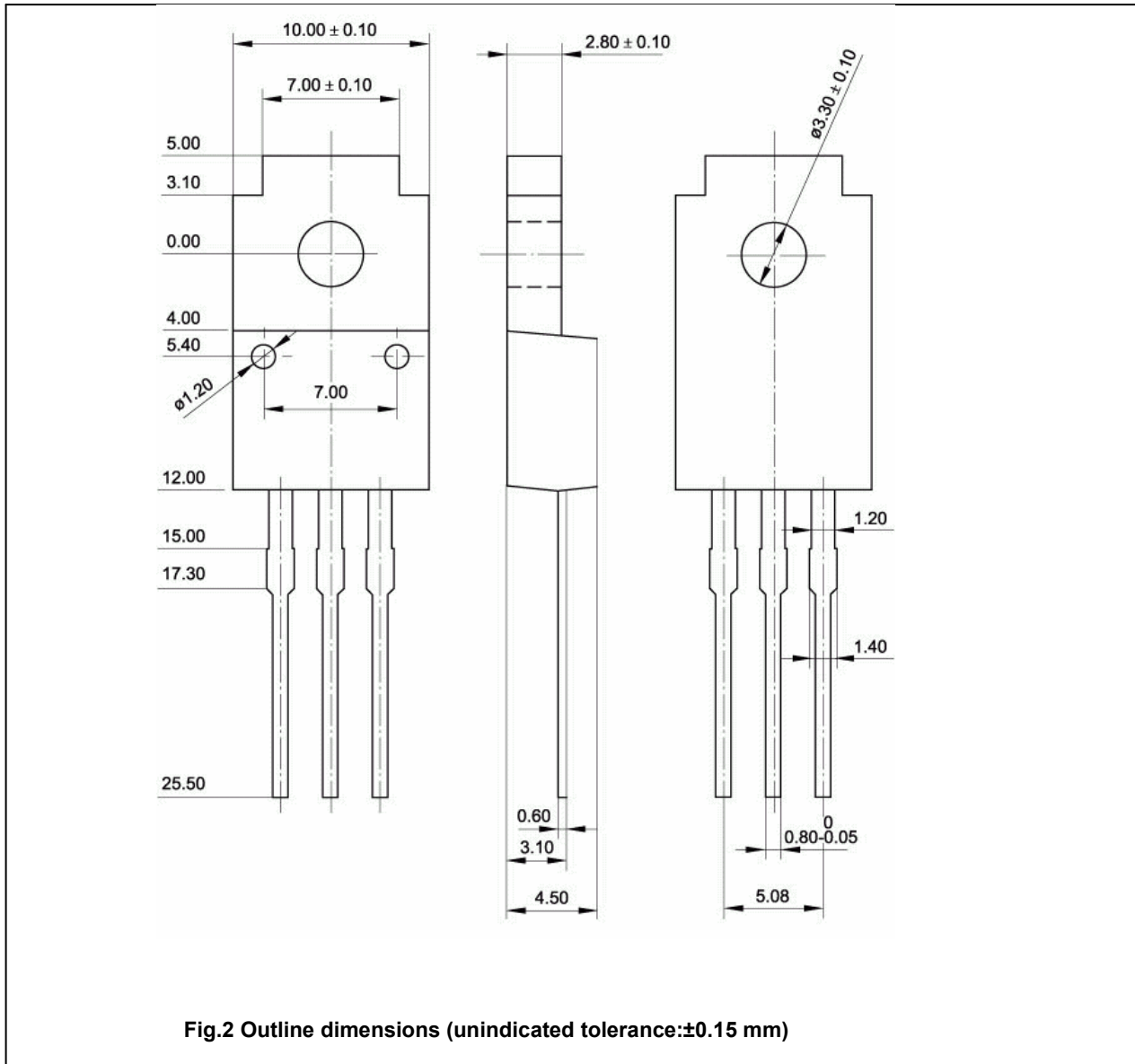


Fig.2 Outline dimensions (unindicated tolerance:  $\pm 0.15$  mm)

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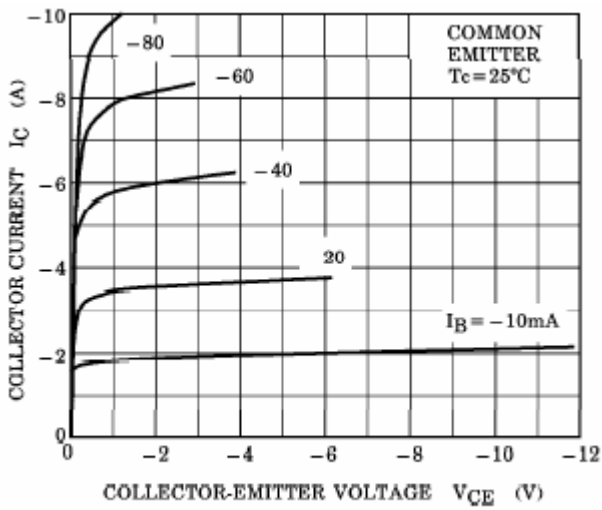


Fig.3 Static Characteristic

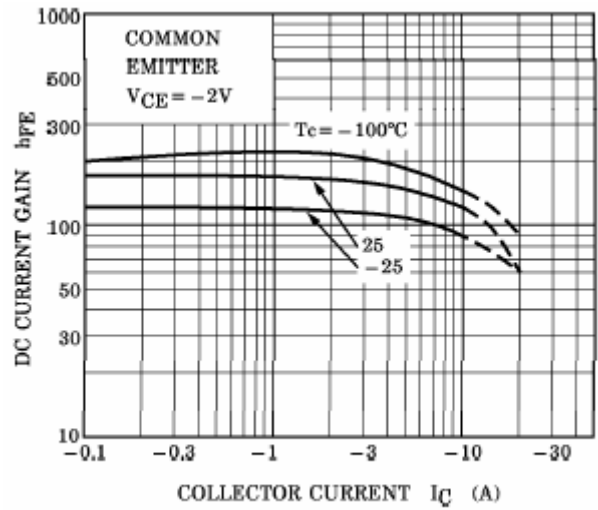


Fig.4 DC current Gain

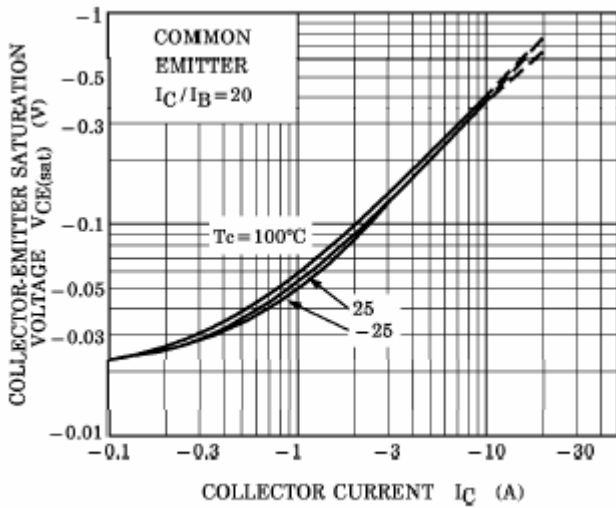


Fig.5 Collector-Emitter Saturation Voltage

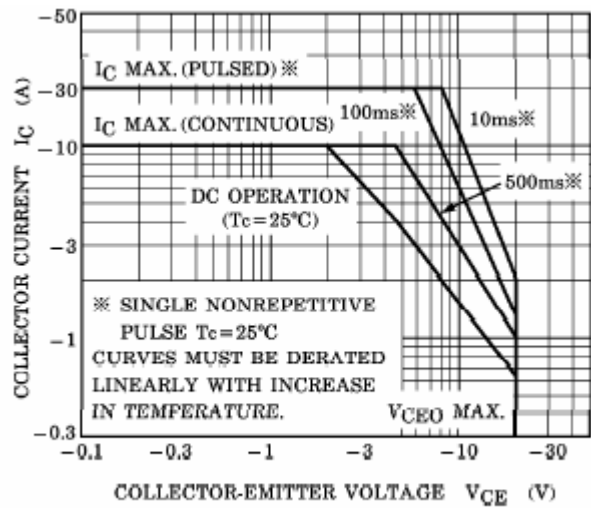


Fig.6 Safe Operating Area