

**Silicon PNP Power Transistors**

**2SB1274**

**DESCRIPTION**

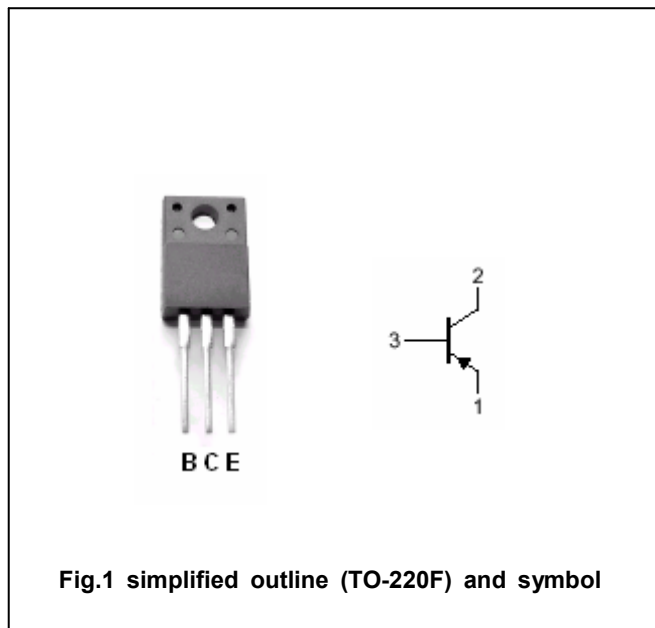
- With TO-220F package
- Complement to type 2SD1913
- High reliability.
- High breakdown voltage
- Low saturation voltage.
- Wide area of safe operation

**APPLICATIONS**

- 60V/3A low-frequency power amplifier
- General 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	-60	V
V <sub>CEO</sub>	Collector-emitter voltage	Open base	-60	V
V <sub>EBO</sub>	Emitter-base voltage	Open collector	-6	V
I <sub>C</sub>	Collector current		-3	A
I <sub>CM</sub>	Collector current-peak		-8	A
P <sub>C</sub>	Collector dissipation	T <sub>C</sub> =25°C	20	W
			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)CBO</sub>	Collector-base breakdown voltage	I <sub>C</sub> =-1mA; I <sub>E</sub> =0	-60			V
V <sub>(BR)CEO</sub>	Collector-emitter breakdown voltage	I <sub>C</sub> =-5mA; R <sub>BE</sub> =∞	-60			V
V <sub>(BR)EBO</sub>	Base-emitter breakdown voltage	I <sub>E</sub> =-1mA; I <sub>C</sub> =0	-6			V
V <sub>CEsat</sub>	Collector-emitter saturation voltage	I <sub>C</sub> =-2A; I <sub>B</sub> =-0.2A		-0.4	-1.0	V
V <sub>BE</sub>	Base-emitter voltage	I <sub>C</sub> =-0.5A; V <sub>CE</sub> =-5V		-0.8	-1.0	V
I <sub>CBO</sub>	Collector cut-off current	V <sub>CB</sub> =-40V; I <sub>E</sub> =0			-0.1	mA
I <sub>EBO</sub>	Emitter cut-off current	V <sub>EB</sub> =-4V; I <sub>C</sub> =0			-0.1	mA
h <sub>FE-1</sub>	DC current gain	I <sub>C</sub> =-0.5A; V <sub>CE</sub> =-5V	70		280	
h <sub>FE-2</sub>	DC current gain	I <sub>C</sub> =-3A; V <sub>CE</sub> =-5V	20			
f <sub>T</sub>	Transition frequency	I <sub>C</sub> =-0.5A; V <sub>CE</sub> =-5V		100		MHz
C <sub>OB</sub>	Output capacitance	I <sub>E</sub> =0; V <sub>CB</sub> =-10V; f=1MHz		60		pF

◆ h<sub>FE-1</sub> classifications

Q	R	S
70-140	100-200	140-280

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PACKAGE OUTLINE

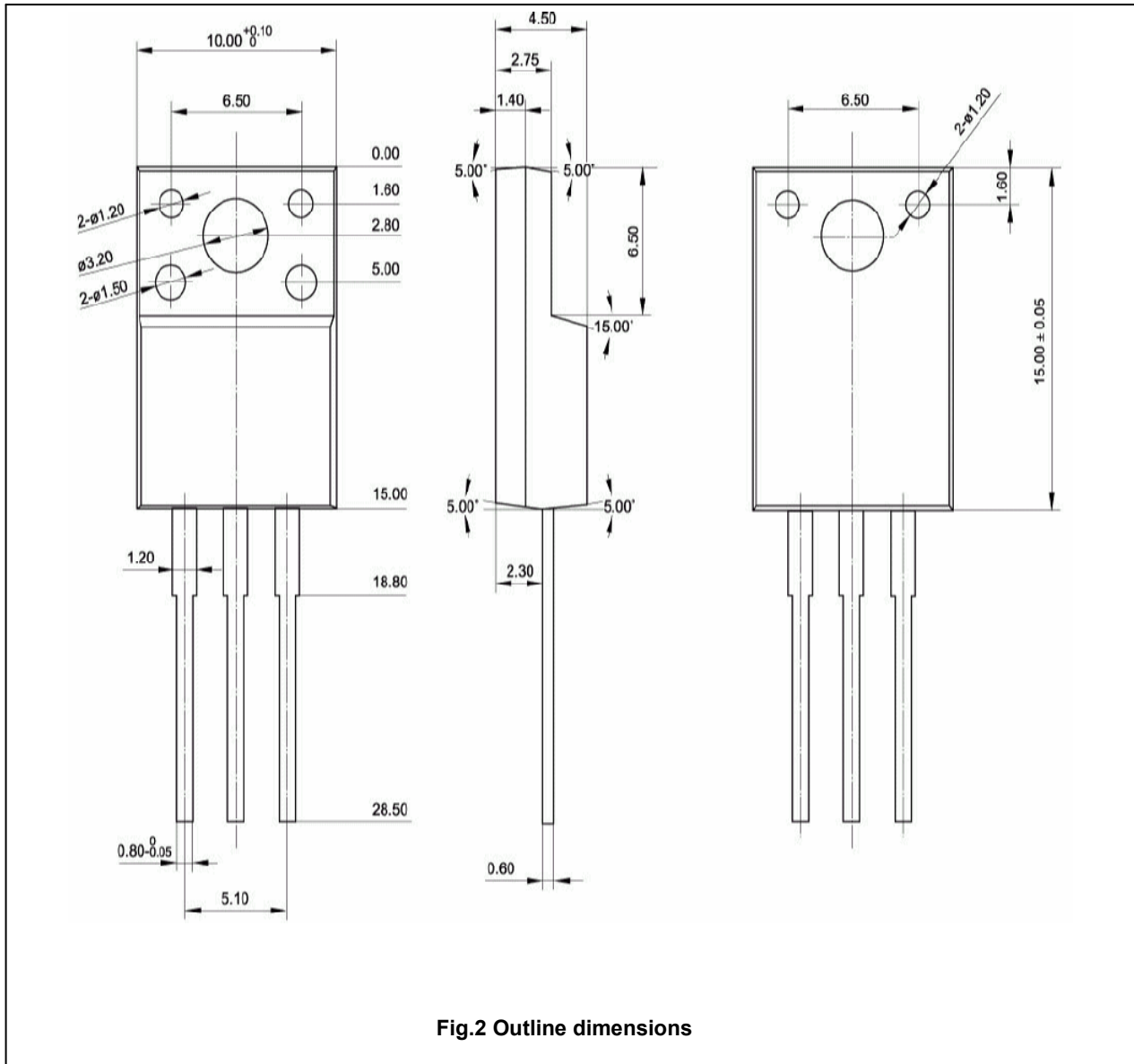


Fig.2 Outline dimensions

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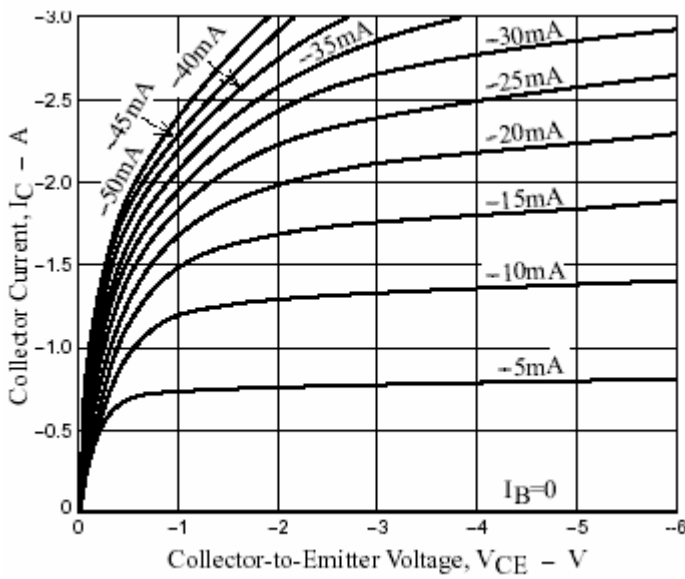


Fig.3 Static Characteristic

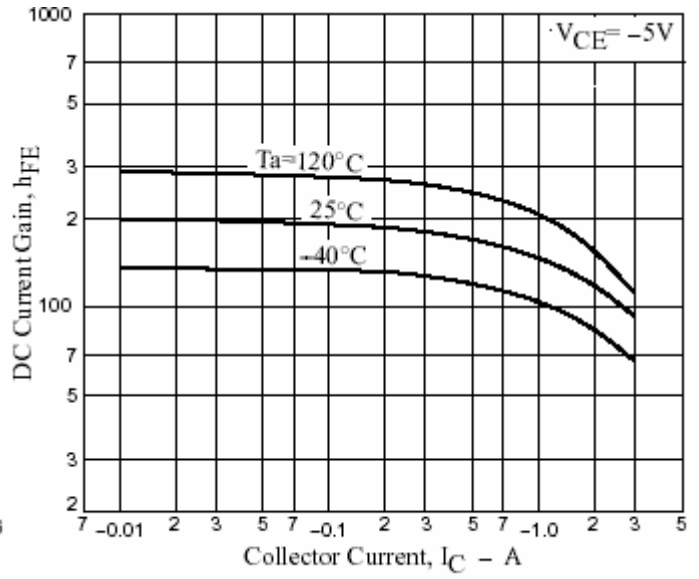


Fig.4 DC current Gain

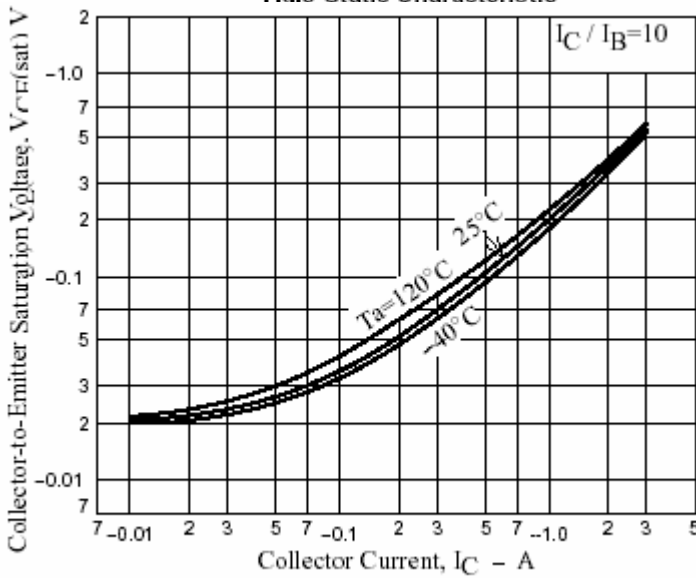


Fig.5 Collector-Emmitter Saturation Voltage

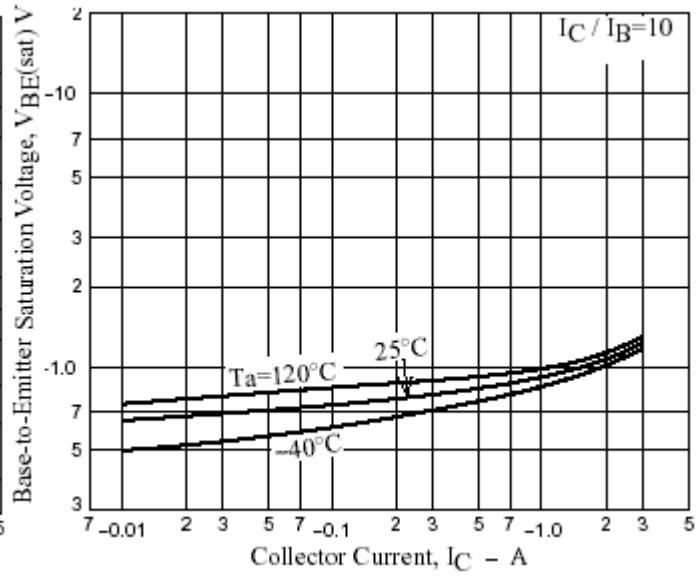


Fig.6 Base-Emmitter Saturation Voltage

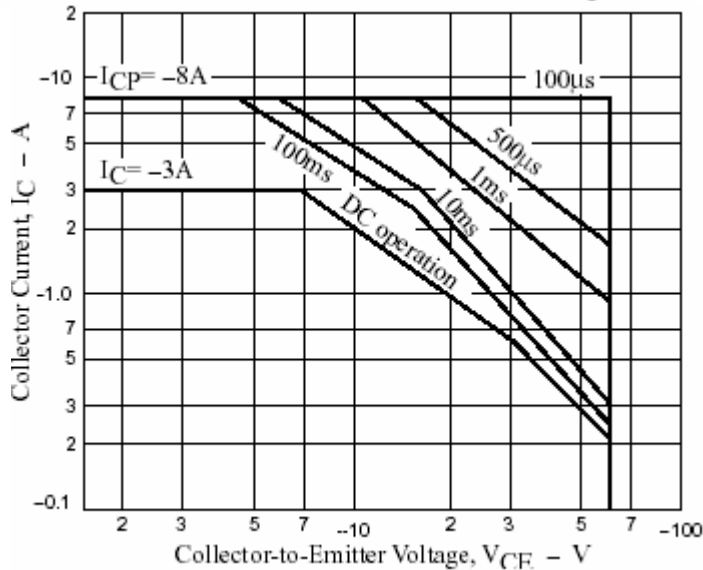


Fig.7 Safe Operating Area