

Silicon PNP Power Transistors

2SB1052

DESCRIPTION

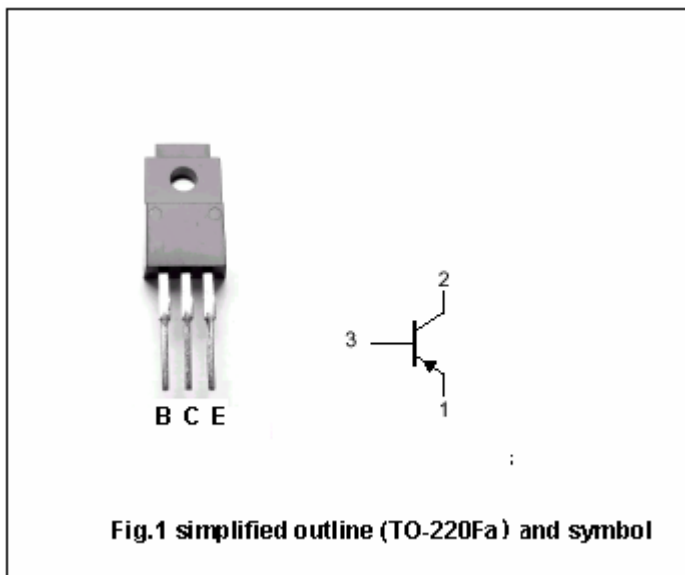
- With TO-220Fa package
- Complement to type 2SD1480
- Low collector saturation voltage

APPLICATIONS

- For power amplifier applications

PINNING

PIN	DESCRIPTION
1	Emitter
2	Collector
3	Base



Absolute maximum ratings(Ta=25 )

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		-2	A
I <sub>CM</sub>	Collector current-peak		-4	A
P <sub>C</sub>	Collector power dissipation	T <sub>a</sub> =25	2.0	W
		T <sub>C</sub> =25	25	
T <sub>j</sub>	Junction temperature		150	
T <sub>stg</sub>	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> =-30mA; I <sub>B</sub> =0	-60			V
V <sub>CEsat</sub>	Collector-emitter saturation voltage	I <sub>C</sub> =-2A ; I <sub>B</sub> =-0.2A			-2.0	V
V <sub>BE</sub>	Base-emitter on voltage	I <sub>C</sub> =-1A ; V <sub>CE</sub> =-4V			-1.2	V
I <sub>CES</sub>	Collector cut-off current	V <sub>CE</sub> =-60V; V <sub>BE</sub> =0			-0.2	mA
I <sub>CEO</sub>	Collector cut-off current	V <sub>CE</sub> =-30V; I <sub>B</sub> =0			-0.3	mA
I <sub>EBO</sub>	Emitter cut-off current	V <sub>EB</sub> =-6V; I <sub>C</sub> =0			-1.0	mA
h <sub>FE-1</sub>	DC current gain	I <sub>C</sub> =-0.1A ; V <sub>CE</sub> =-4V	35			
h <sub>FE-2</sub>	DC current gain	I <sub>C</sub> =-1A ; V <sub>CE</sub> =-4V	40		250	

## Switching times

t <sub>on</sub>	Turn-on time	I <sub>C</sub> =-1A ; I <sub>B1</sub> =-I <sub>B2</sub> =-0.1A		0.1		μs
t <sub>stg</sub>	Storage time			1.5		μs
t <sub>f</sub>	Fall time			0.3		μs

◆ h<sub>FE-2</sub> Classifications

R	Q	P
40-90	70-150	120-250

PACKAGE OUTLINE

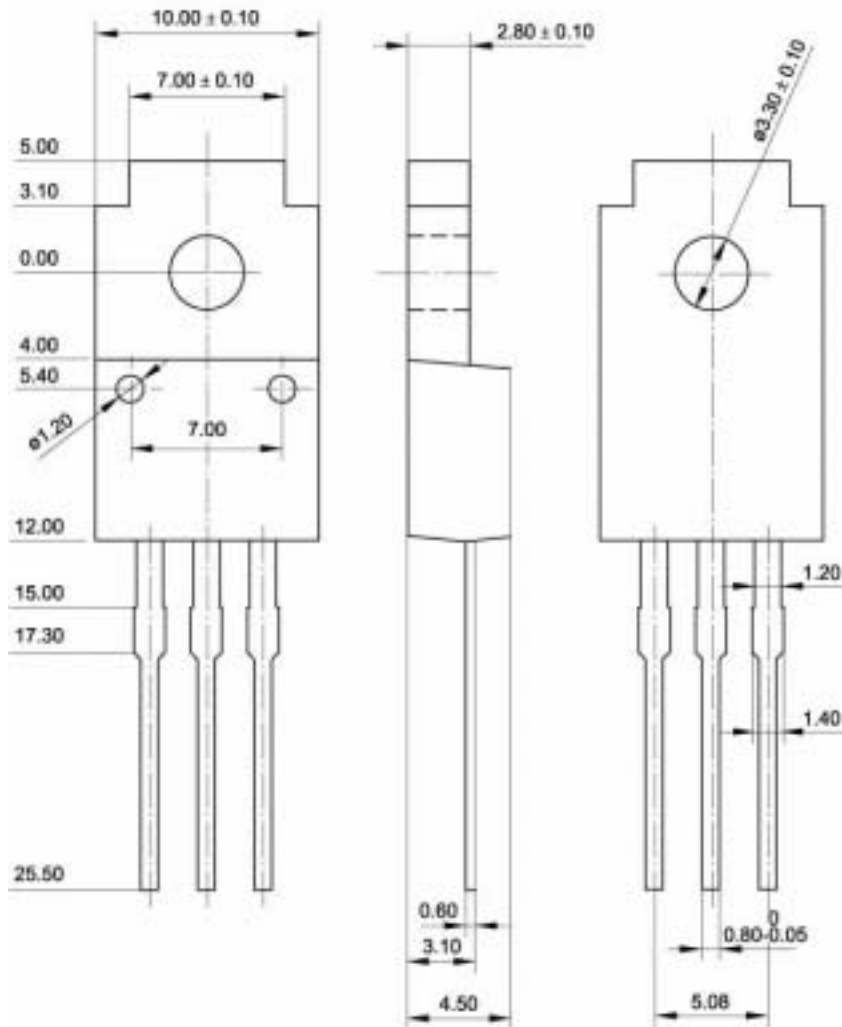


Fig.2 Outline dimensions (unindicated tolerance:  $\pm 0.15$  mm)