

**Silicon PNP Power Transistors**

**2SB689**

**DESCRIPTION**

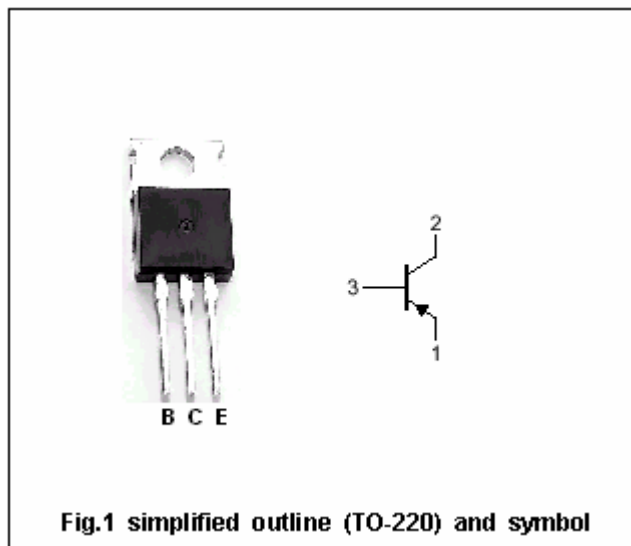
- With TO-220C package
- Low collector saturation voltage
- High power dissipation

**APPLICATIONS**

- For low frequency power amplifier, TV vertical deflection output applications

**PINNING**

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



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

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V <sub>CBO</sub>	Collector-base voltage	Open emitter	-100	V
V <sub>CEO</sub>	Collector-emitter voltage	Open base	-100	V
V <sub>EBO</sub>	Emitter-base voltage	Open collector	-4	V
I <sub>C</sub>	Collector current		-4	A
I <sub>CM</sub>	Collector current-peak		-5	A
P <sub>C</sub>	Collector power dissipation	T <sub>C</sub> =25°C	40	W
		T <sub>a</sub> =25°C	1.8	
T <sub>j</sub>	Junction temperature		150	°C
T <sub>stg</sub>	Storage temperature		-45~150	°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; R <sub>BE</sub> =∞	-100			V
V <sub>(BR)EBO</sub>	Emitter-base breakdown voltage	I <sub>E</sub> =-1mA; I <sub>C</sub> =0	-4			V
V <sub>CEsat</sub>	Collector-emitter saturation voltage	I <sub>C</sub> =-1A; I <sub>B</sub> =-0.1 A			-1.0	V
I <sub>CEO</sub>	Collector cut-off current	V <sub>CE</sub> =-80V; R <sub>BE</sub> =∞			-100	μA
I <sub>EBO</sub>	Emitter cut-off current	V <sub>EB</sub> =-3.5V; I <sub>C</sub> =0			-50	μA
h <sub>FE-1</sub>	DC current gain	I <sub>C</sub> =-0.5A; V <sub>CE</sub> =-4V	50		250	
h <sub>FE-2</sub>	DC current gain	I <sub>C</sub> =-50mA; V <sub>CE</sub> =-4V	25		350	

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PACKAGE OUTLINE

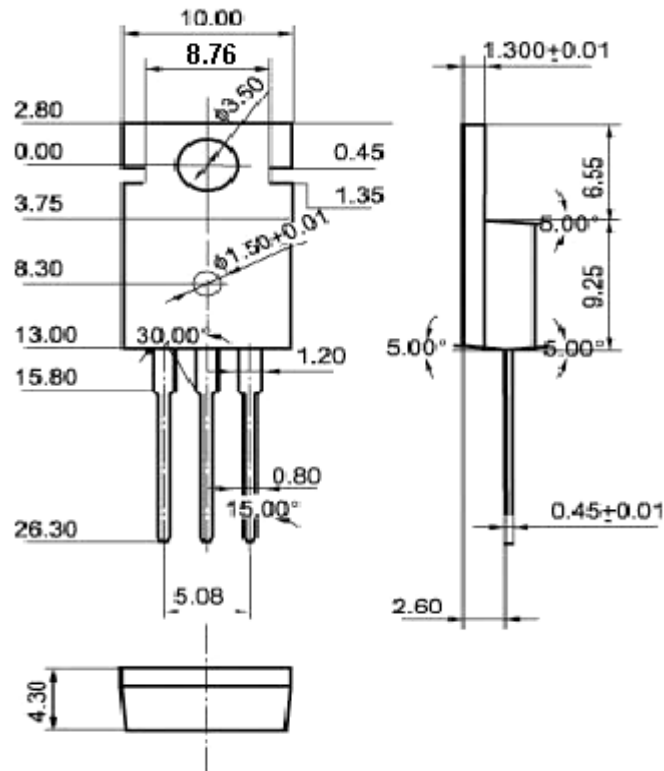


Fig.2 Outline dimensions (unindicated tolerance:  $\pm 0.10$  mm)