

**Silicon PNP Power Transistors**

**2SA770 2SA771**

**DESCRIPTION**

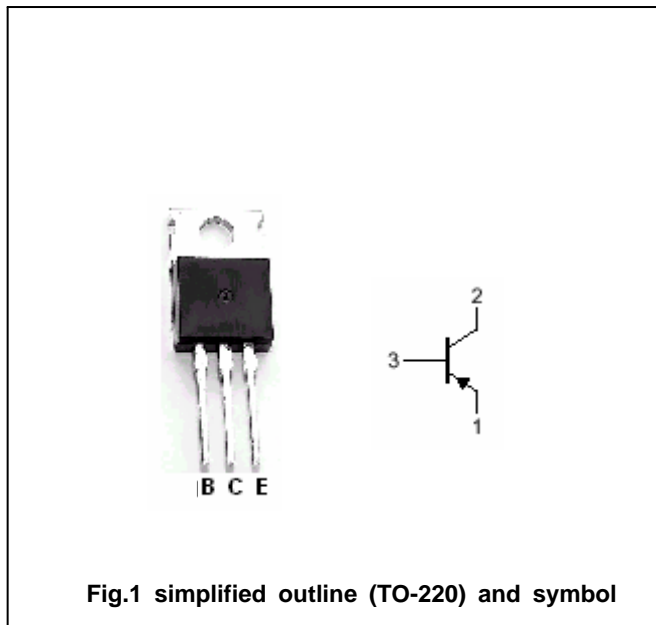
- With TO-220 package
- Complement to type 2SC1985/1986
- Low collector saturation voltage

**APPLICATIONS**

- For general and industrial purpose applications

**PINNING**

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



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

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT	
V <sub>CBO</sub>	Collector-base voltage	Open emitter	2SA770	-60	V
			2SA771	-80	
V <sub>CEO</sub>	Collector-emitter voltage	Open base	2SA770	-60	V
			2SA771	-80	
V <sub>EBO</sub>	Emitter-base voltage	Open collector	-6	V	
I <sub>C</sub>	Collector current		-6	A	
I <sub>B</sub>	Base current		-3	A	
P <sub>C</sub>	Collector power dissipation	T <sub>C</sub> =25	40	W	
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	2SA770	I <sub>C</sub> =-25mA, I <sub>B</sub> =0	-60		V
		2SA771		-80		
V <sub>CEsat</sub>	Collector-emitter saturation voltage	I <sub>C</sub> =-3A; I <sub>B</sub> =-0.3A			-1.0	V
I <sub>CBO</sub>	Collector cut-off current	2SA770	V <sub>CB</sub> =-60V; I <sub>E</sub> =0		-1.0	mA
		2SA771		V <sub>CB</sub> =-80V; I <sub>E</sub> =0		
I <sub>EBO</sub>	Emitter cut-off current	V <sub>EB</sub> =-6V; I <sub>C</sub> =0			-1.0	mA
h <sub>FE</sub>	DC current gain	I <sub>C</sub> =-1A; V <sub>CE</sub> =-4V	40			
f <sub>T</sub>	Transition frequency	I <sub>C</sub> =-0.5A; V <sub>CE</sub> =-12V		10		MHz

## Switching times

t <sub>r</sub>	Rise time	I <sub>C</sub> =-3A; V <sub>CC</sub> =-9V I <sub>B1</sub> =-I <sub>B2</sub> =-0.4A; R <sub>L</sub> =3		0.9		μs
t <sub>stg</sub>	Storage time			1.0		μs
t <sub>f</sub>	Fall time			0.1		μs

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PACKAGE OUTLINE

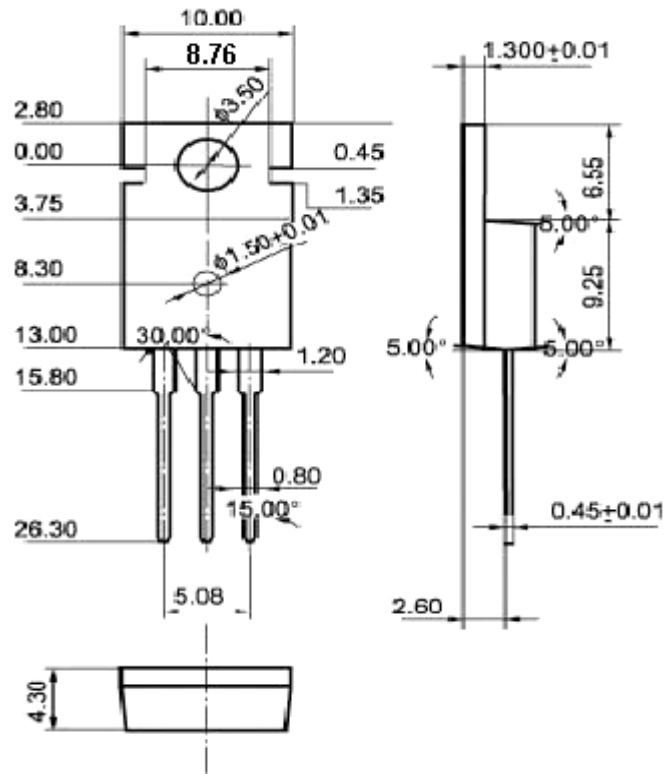


Fig.2 Outline dimensions(unindicated tolerance:  $\pm 0.10$  mm)