

**Silicon NPN Power Transistors**

**2SC2275 2SC2275A**

**DESCRIPTION**

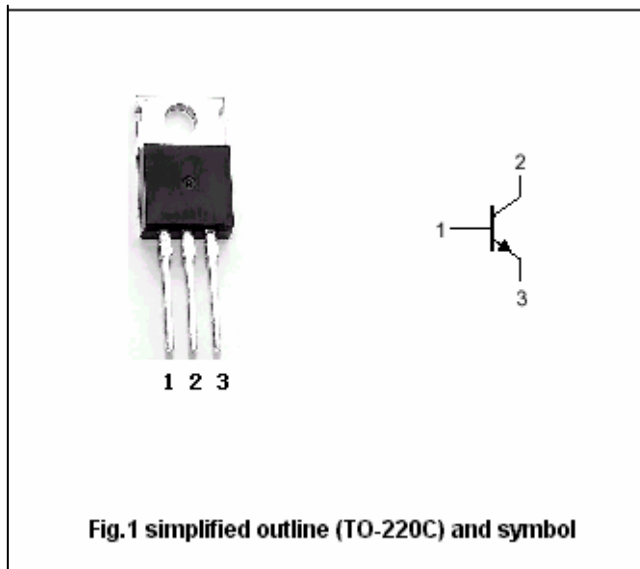
- With TO-220 package
- Complement to type 2SA985/985A
- High breakdown voltage

**APPLICATIONS**

- For low frequency and high frequency power amplifier applications

**PINNING**

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



**Absolute maximum ratings(Ta=25°C)**

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V <sub>CBO</sub>	Collector-base voltage	2SC2275	120	V
		2SC2275A	150	
V <sub>CEO</sub>	Collector-emitter voltage	2SC2275	120	V
		2SC2275A	150	
V <sub>EBO</sub>	Emitter-base voltage	Open collector	5	V
I <sub>C</sub>	Collector current		1.5	A
I <sub>CM</sub>	Collector current-peak		3.0	A
I <sub>B</sub>	Base current		0.3	A
P <sub>C</sub>	Collector power dissipation	T <sub>C</sub> =25°C	25	W
T <sub>j</sub>	Junction temperature		150	°C
T <sub>stg</sub>	Storage temperature		-55~150	°C

## Silicon NPN Power Transistors

## 2SC2275 2SC2275A

## 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> =25mA, I <sub>B</sub> =0	120			V
			150			
V <sub>CEsat</sub>	Collector-emitter saturation voltage	I <sub>C</sub> =1A; I <sub>B</sub> =0.1A			2.0	V
V <sub>BEsat</sub>	Base-emitter saturation voltage	I <sub>C</sub> =1A; I <sub>B</sub> =0.1A			1.5	V
I <sub>CBO</sub>	Collector cut-off current	V <sub>CB</sub> =120V; I <sub>E</sub> =0			1.0	μA
I <sub>EBO</sub>	Emitter cut-off current	V <sub>EB</sub> =3V; I <sub>C</sub> =0			1.0	μA
h <sub>FE-1</sub>	DC current gain	I <sub>C</sub> =5mA; V <sub>CE</sub> =5V	35			
h <sub>FE-2</sub>	DC current gain	I <sub>C</sub> =0.3A; V <sub>CE</sub> =5V	60	150	320	
C <sub>OB</sub>	Output capacitance	I <sub>E</sub> =0; V <sub>CB</sub> =10V, f=1MHz		19		pF
f <sub>T</sub>	Transition frequency	I <sub>C</sub> =0.2A; V <sub>CE</sub> =5V		200		MHz

◆ h<sub>FE-2</sub> Classifications

R	Q	P
60-120	100-200	160-320

Silicon NPN Power Transistors

2SC2275 2SC2275A

PACKAGE OUTLINE

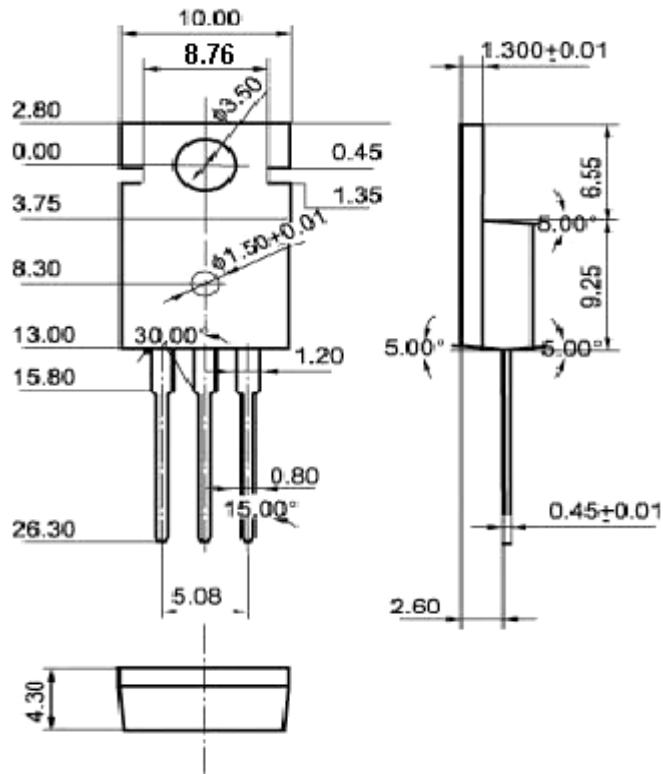


Fig.2 Outline dimensions(unindicated tolerance:  $\pm 0.10$  mm)