

## Inchange Semiconductor

## Product Specification

## Silicon NPN Power Transistors

## 2SC2275 2SC2275A

## DESCRIPTION

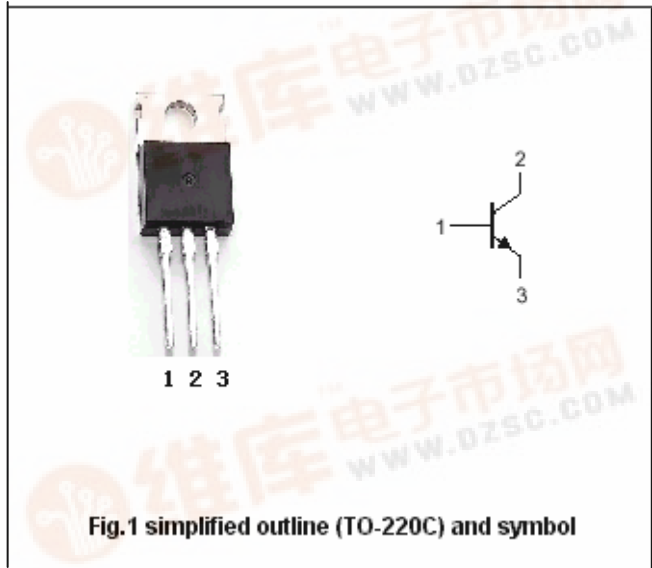
- With TO-220 package
- Complement to type 2SA985/985A
- High breakdown voltage

## 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( $T_a=25^\circ\text{C}$ )

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
$V_{CBO}$	Collector-base voltage	2SC2275	120	V
		2SC2275A	150	
$V_{CEO}$	Collector-emitter voltage	2SC2275	120	V
		2SC2275A	150	
$V_{EBO}$	Emitter-base voltage	Open collector	5	V
$I_C$	Collector current		1.5	A
$I_{CM}$	Collector current-peak		3.0	A
$I_B$	Base current		0.3	A
$P_C$	Collector power dissipation	$T_C=25$	25	W
$T_j$	Junction temperature		150	
$T_{stg}$	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	2SC2275	I <sub>C</sub> =25mA, I <sub>B</sub> =0	120			V
		2SC2275A		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

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## PACKAGE OUTLINE

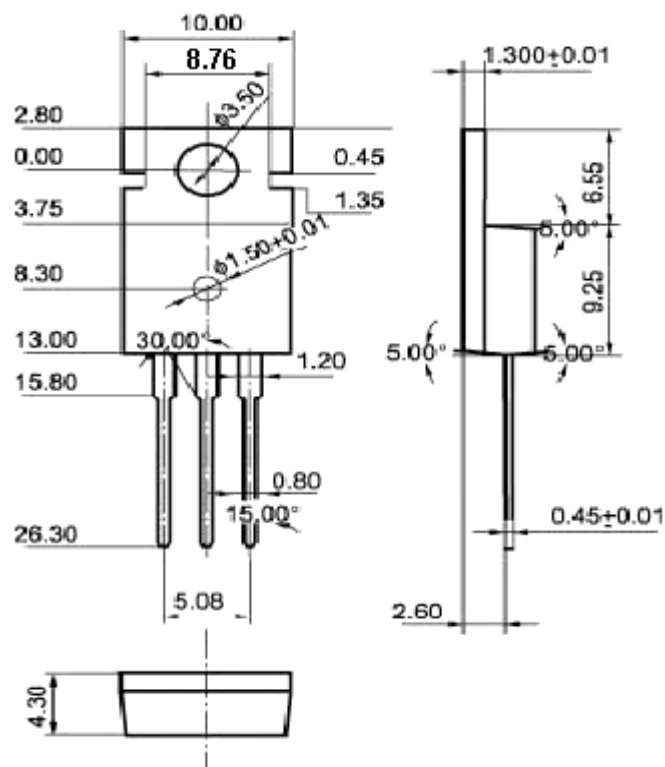


Fig.2 Outline dimensions(unindicated tolerance: ± 0.10 mm)