

**Silicon NPN Power Transistors**

**2SC1624 2SC1625**

**DESCRIPTION**

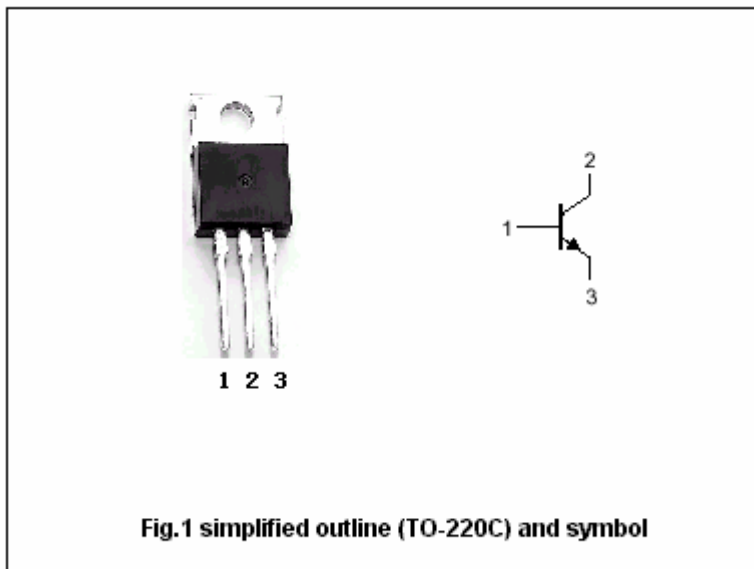
- With TO-220 package
- Complement to type 2SA814/815
- High breakdown voltage

**APPLICATIONS**

- Medium power amplifier applications
- Driver stage 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	2SC1624	120	V
		2SC1625	100	
V <sub>CEO</sub>	Collector-emitter voltage	2SC1624	120	V
		2SC1625	100	
V <sub>EBO</sub>	Emitter-base voltage	Open collector	5	V
I <sub>C</sub>	Collector current		1	A
I <sub>E</sub>	Emitter current		-1	A
P <sub>C</sub>	Collector power dissipation	T <sub>C</sub> =25°C	15	W
T <sub>j</sub>	Junction temperature		150	°C
T <sub>stg</sub>	Storage temperature		-55~150	°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	2SC1624	I <sub>C</sub> =10mA; I <sub>B</sub> =0			V
		2SC1625				
V <sub>(BR)EBO</sub>	Emitter-base breakdown voltage	I <sub>E</sub> =1mA; I <sub>C</sub> =0	5			V
V <sub>CEsat</sub>	Collector-emitter saturation voltage	I <sub>C</sub> =500mA; I <sub>B</sub> =50mA			0.5	V
V <sub>BE</sub>	Base-emitter on voltage	I <sub>C</sub> =500mA; V <sub>CE</sub> =5V			1.0	V
I <sub>CBO</sub>	Collector cut-off current	V <sub>CB</sub> =50V; I <sub>E</sub> =0			1.0	μA
I <sub>EBO</sub>	Emitter cut-off current	V <sub>EB</sub> =5V; I <sub>C</sub> =0			1.0	μA
h <sub>FE-1</sub>	DC current gain	I <sub>C</sub> =150mA; V <sub>CE</sub> =5V	70		240	
h <sub>FE-2</sub>	DC current gain	I <sub>C</sub> =500mA; V <sub>CE</sub> =5V	40			
C <sub>OB</sub>	Output capacitance	I <sub>E</sub> =0; V <sub>CB</sub> =10V; f=1MHz		20		pF
f <sub>T</sub>	Transition frequency	I <sub>C</sub> =150mA; V <sub>CE</sub> =5V		30		MHz

◆ h<sub>FE-1</sub> Classifications

O	Y
70-140	120-240

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PACKAGE OUTLINE

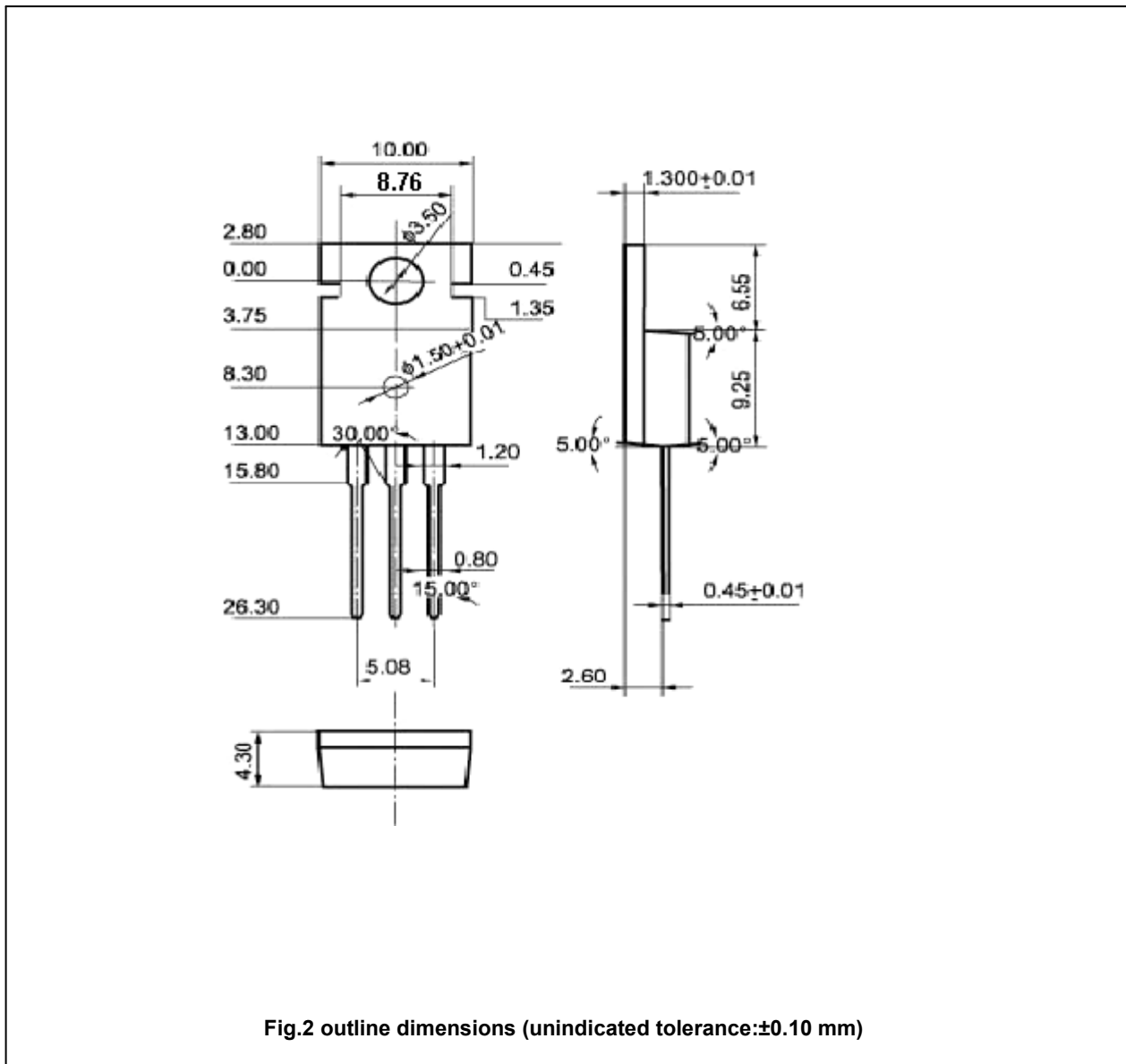


Fig.2 outline dimensions (unindicated tolerance:±0.10 mm)