

**Inchange Semiconductor**

**Product Specification**

**Silicon NPN Power Transistors**

**2N5598 2N5600 2N5602 2N5604**

**DESCRIPTION**

- With TO-66 package
- Excellent safe operating area
- Low collector saturation voltage

**APPLICATIONS**

- For high frequency power amplifier ; audio power amplifier and drivers.

**PINNING(see Fig.2)**

PIN	DESCRIPTION
1	Base
2	Emitter
3	Collector

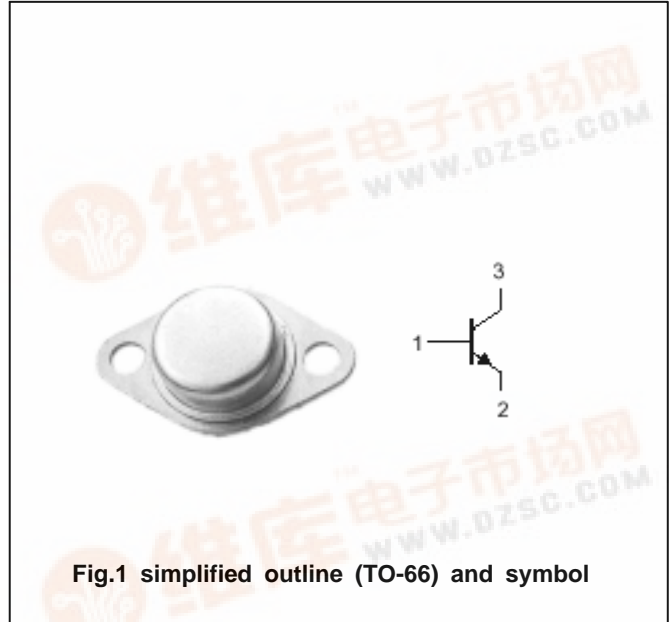


Fig.1 simplified outline (TO-66) and symbol

**Absolute maximum ratings(Ta= )**

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V <sub>CBO</sub>	Collector-base voltage	2N5598	80	V
		2N5600/5602	100	
		2N5604	120	
V <sub>CEO</sub>	Collector-emitter voltage	2N5598	60	V
		2N5600/5602	80	
		2N5604	100	
V <sub>EBO</sub>	Emitter-base voltage	Open collector	5	V
I <sub>C</sub>	Collector current		2	A
P <sub>D</sub>	Total power dissipation	T <sub>C</sub> =25	20	W
T <sub>j</sub>	Junction temperature		150	
T <sub>stg</sub>	Storage temperature		-65~150	

**THERMAL CHARACTERISTICS**

SYMBOL	PARAMETER	VALUE	UNIT
R <sub>th j-c</sub>	Thermal resistance junction to case	4.37	/W

## Silicon NPN Power Transistors

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## CHARACTERISTICS

T<sub>j</sub>=25 unless otherwise specified

SYMBOL	PARAMETER		CONDITIONS	MIN	TYP.	MAX	UNIT
V <sub>CEO(SUS)</sub>	Collector-emitter sustaining voltage	2N5598	I <sub>C</sub> =50mA ; I <sub>B</sub> =0	60			V
		2N5600/5602		80			
		2N5604		100			
V <sub>CEsat</sub>	Collector-emitter saturation voltage		I <sub>C</sub> =1A; I <sub>B</sub> =0.1A			1.0	V
V <sub>BE</sub>	Base-emitter on voltage		I <sub>C</sub> =1A ; V <sub>CE</sub> =5V			1.5	V
I <sub>CBO</sub>	Collector cut-off current		V <sub>CB</sub> =Rated V <sub>CBO</sub> ; I <sub>E</sub> =0			0.1	mA
I <sub>CEO</sub>	Collector cut-off current		V <sub>CE</sub> = Rated V <sub>CEO</sub> , I <sub>B</sub> =0			1.0	mA
I <sub>EBO</sub>	Emitter cut-off current		V <sub>EB</sub> =5V; I <sub>C</sub> =0			0.1	mA
h <sub>FE</sub>	DC current gain	2N5598/5602	I <sub>C</sub> =1A ; V <sub>CE</sub> =5V	70		200	
		2N5600/5604		30		90	
f <sub>T</sub>	Transition frequency	2N5598/5602	I <sub>C</sub> =0.5A ; V <sub>CE</sub> =10V	60			MHz
		2N5600/5604		50			

PACKAGE OUTLINE

