

## Silicon PNP Power Transistors

## 2N4898 2N4899 2N4900

## DESCRIPTION

- With TO-66 package
- Low collector saturation voltage
- Excellent safe operating area
- 2N4900 complement to type 2N4912

## APPLICATIONS

- Designed for driver circuits, switching and amplifier applications

## PINNING

PIN	DESCRIPTION
1	Base
2	Emitter
3	Collector

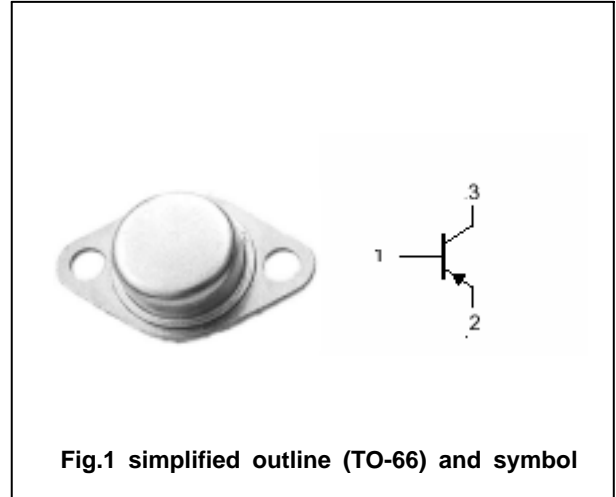


Fig.1 simplified outline (TO-66) and symbol

## Absolute maximum ratings(Ta= )

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT	
V <sub>CBO</sub>	Collector-base voltage	Open emitter	2N4898	-40	V
			2N4899	-60	
			2N4900	-80	
V <sub>CEO</sub>	Collector-emitter voltage	Open base	2N4898	-40	V
			2N4899	-60	
			2N4900	-80	
V <sub>EBO</sub>	Emitter-base voltage	Open collector	-5	V	
I <sub>C</sub>	Collector current		-1.0	A	
I <sub>CM</sub>	Collector current-peak		-4.0	A	
I <sub>B</sub>	Base current		-1.0	A	
P <sub>D</sub>	Total Power Dissipation	T <sub>C</sub> =25	25	W	
T <sub>j</sub>	Junction temperature		150		
T <sub>stg</sub>	Storage temperature		-65~200		

## THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	VALUE	UNIT
R <sub>th j-c</sub>	Thermal resistance junction to case	7.0	/W

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## CHARACTERISTICS

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

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT	
V <sub>CE0(SUS)</sub>	Collector-emitter sustaining voltage	2N4898	-40			V	
		2N4899	-60				
		2N4900	-80				
V <sub>CEsat</sub>	Collector-emitter saturation voltage	I <sub>C</sub> =-1A; I <sub>B</sub> =-0.1A			-0.6	V	
V <sub>BEsat</sub>	Collector-emitter saturation voltage	I <sub>C</sub> =-1A; I <sub>B</sub> =-0.1A			-1.3	V	
V <sub>BE</sub>	Base-emitter on voltage	I <sub>C</sub> =-1A; V <sub>CE</sub> =-1V			-1.3	V	
I <sub>CEO</sub>	Collector cut-off current	2N4898	V <sub>CE</sub> =-20V; I <sub>B</sub> =0			-0.5	mA
		2N4899	V <sub>CE</sub> =-30V; I <sub>B</sub> =0				
		2N4900	V <sub>CE</sub> =-40V; I <sub>B</sub> =0				
I <sub>CEx</sub>	Collector cut-off current	V <sub>CE</sub> =Rated V <sub>CE0</sub> ; V <sub>BE(off)</sub> =1.5V T <sub>C</sub> =150			-0.1 -1.0	mA	
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>EBO</sub>	Emitter cut-off current	V <sub>EB</sub> =-5V; I <sub>C</sub> =0			-1.0	mA	
h <sub>FE-1</sub>	DC current gain	I <sub>C</sub> =-50mA; V <sub>CE</sub> =-1V	40				
h <sub>FE-2</sub>	DC current gain	I <sub>C</sub> =-500mA; V <sub>CE</sub> =-1V	20		100		
h <sub>FE-3</sub>	DC current gain	I <sub>C</sub> =-1.0A; V <sub>CE</sub> =-1V	10				
C <sub>OB</sub>	Output capacitance	I <sub>E</sub> =0; V <sub>CB</sub> =-10V; f=1MHz			100	pF	
f <sub>T</sub>	Transition frequency	I <sub>C</sub> =-250mA; V <sub>CE</sub> =-10V	3.0			MHz	

