

## Silicon NPN Power Transistors

## 2N6372 2N6373 2N6374

## DESCRIPTION

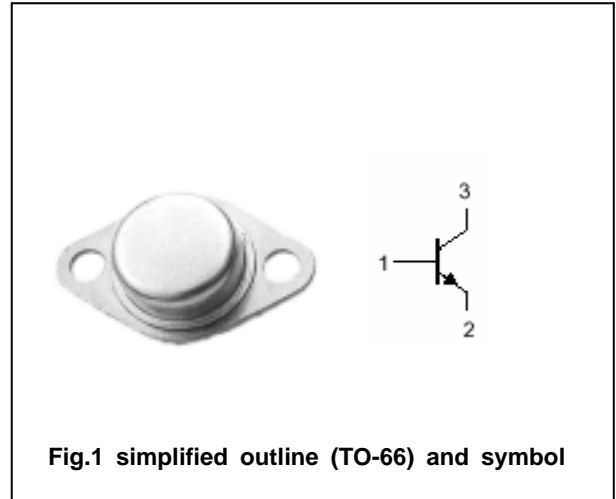
- With TO-66 package
- Low collector saturation voltage
- Excellent safe operating area

## APPLICATIONS

- Designed for switching and wide-band amplifier applications

## PINNING

PIN	DESCRIPTION
1	Base
2	Emitter
3	Collector



## Absolute maximum ratings(Ta= )

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V <sub>CBO</sub>	Collector-base voltage	2N6372	90	V
		2N6373	70	
		2N6374	50	
V <sub>CEO</sub>	Collector-emitter voltage	2N6372	80	V
		2N6373	60	
		2N6374	40	
V <sub>EBO</sub>	Emitter-base voltage	Open collector	6	V
I <sub>C</sub>	Collector current		6	A
P <sub>D</sub>	Total Power Dissipation	T <sub>C</sub> =25	40	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	4.37	/W

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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	2N6372	I <sub>C</sub> =0.1A ; I <sub>B</sub> =0	80			V
		2N6373		60			
		2N6374		40			
V <sub>CEsat-1</sub>	Collector-emitter saturation voltage	I <sub>C</sub> =2A; I <sub>B</sub> =0.2A			0.7	V	
V <sub>CEsat-2</sub>	Collector-emitter saturation voltage	I <sub>C</sub> =6A; I <sub>B</sub> =0.6A			1.2	V	
V <sub>BEsat-1</sub>	Base-emitter saturation voltage	I <sub>C</sub> =2A; I <sub>B</sub> =0.2A			1.2	V	
V <sub>BEsat-2</sub>	Base-emitter saturation voltage	I <sub>C</sub> =6A; I <sub>B</sub> =0.6A			2.0	V	
I <sub>CEO</sub>	Collector cut-off current	2N6372	V <sub>CE</sub> =80V; I <sub>B</sub> =0			0.1	mA
		2N6373		V <sub>CE</sub> =60V; I <sub>B</sub> =0			
		2N6374		V <sub>CE</sub> =40V; I <sub>B</sub> =0			
I <sub>CBO</sub>	Collector cut-off current	V <sub>CB</sub> =Rated V <sub>CB</sub> ; I <sub>E</sub> =0			10	μ A	
I <sub>EBO</sub>	Emitter cut-off current	V <sub>EB</sub> =6V; I <sub>C</sub> =0			0.1	mA	
h <sub>FE</sub>	DC current gain	2N6372	I <sub>C</sub> =2A ; V <sub>CE</sub> =2V	20	100		
		2N6373					I <sub>C</sub> =2.5A ; V <sub>CE</sub> =2V
		2N6374					I <sub>C</sub> =3A ; V <sub>CE</sub> =2V
f <sub>T</sub>	Transition frequency	I <sub>C</sub> =0.5A; V <sub>CE</sub> =10V; f=1MHz		4		MHz	

PACKAGE OUTLINE

