

Silicon NPN Power Transistors

2N4913 2N4914 2N4915

DESCRIPTION

- With TO-3 package
- Complement to type 2N4904/4905/4906
- Low collector saturation voltage

APPLICATIONS

- For general-purpose switching and power amplifier applications.

PINNING

PIN	DESCRIPTION
1	Base
2	Emitter
3	Collector

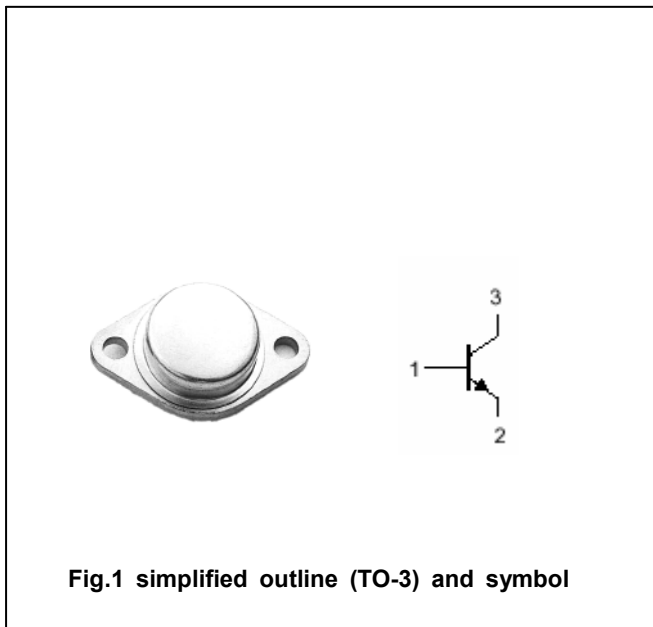


Fig.1 simplified outline (TO-3) and symbol

Absolute maximum ratings(Ta=□)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V _{CBO}	Collector-base voltage	2N4913	40	V
		2N4914	60	
		2N4915	80	
V _{CEO}	Collector-emitter voltage	2N4913	40	V
		2N4914	60	
		2N4915	80	
V _{EBO}	Emitter-base voltage	Open collector	5	V
I _C	Collector current		5	A
I _B	Base current		1	A
P _D	Total power dissipation	T _C =25□	87.5	W
T _j	Junction temperature		150	□
T _{stg}	Storage temperature		-65~200	□

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	VALUE	UNIT
R _{th j-c}	Thermal resistance junction to case	2.0	□/W

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CHARACTERISTICS

T_j=25 °C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{CEO(SUS)}	Collector-emitter sustaining voltage	2N4913	40			V
		2N4914	60			
		2N4915	80			
		I _C =0.2A ; I _B =0				
V _{CEsat-1}	Collector-emitter saturation voltage	I _C =2.5A ; I _B =0.25A			1.0	V
V _{CEsat-2}	Collector-emitter saturation voltage	I _C =5A ; I _B =1A			1.5	V
V _{BE}	Base-emitter on voltage	I _C =2.5A ; V _{CE} =2V			1.4	V
I _{CEO}	Collector cut-off current	V _{CE} =Rated V _{CEO} ; I _B =0			1.0	mA
I _{CBO}	Collector cut-off current	V _{CB} =Rated V _{CBO} ; I _E =0			1.0	mA
I _{CEV}	Collector cut-off current	V _{CE} = Rated V _{CEO} ; V _{BE(off)} =1.5V T _C =150 °C			1.0 2.0	mA
I _{EBO}	Emitter cut-off current	V _{EB} =5V ; I _C =0			1.0	mA
h _{FE-1}	DC current gain	I _C =2.5A ; V _{CE} =2V	25		100	
h _{FE-2}	DC current gain	I _C =5A ; V _{CE} =2V	7			
f _T	Transition frequency	I _C =1A ; V _{CE} =10V ; f=1.0MHz	4			MHz

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PACKAGE OUTLINE

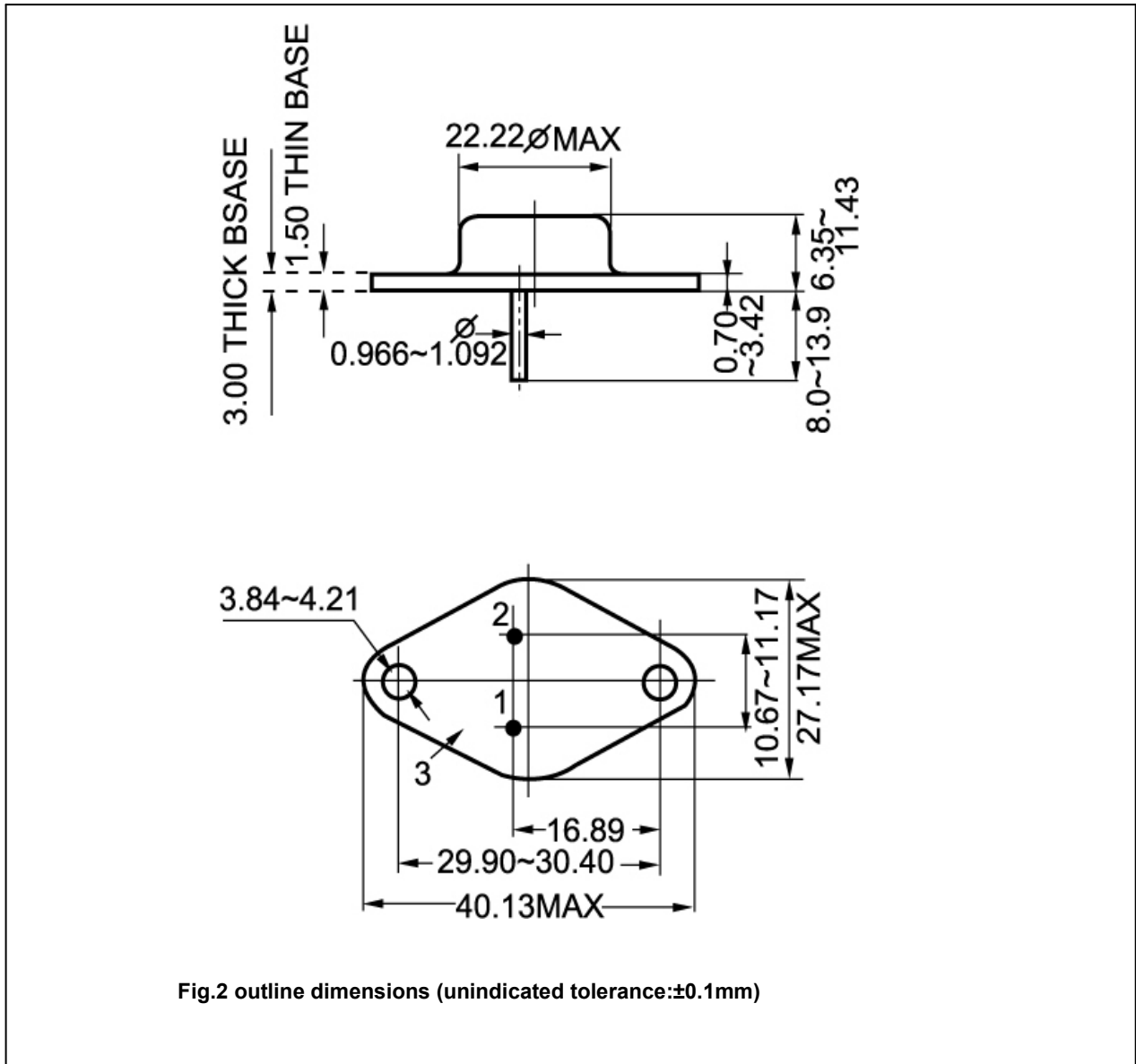


Fig.2 outline dimensions (unindicated tolerance:±0.1mm)