

## Silicon NPN Power Transistors

## 2N6216 2N6217

**DESCRIPTION**

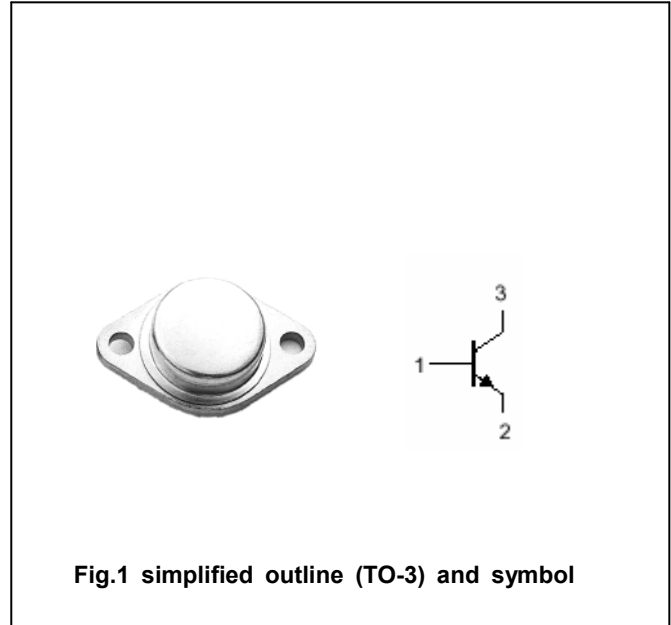
- With TO-3 package
- High current ,high power dissipation

**APPLICATIONS**

- For use in switching and linear power 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	2N6216	200	V
		2N6217	180	
V <sub>CEO</sub>	Collector-emitter voltage	2N6216	150	V
		2N6217	140	
V <sub>EBO</sub>	Emitter-base voltage	Open collector	7	V
I <sub>C</sub>	Collector current		10	A
P <sub>D</sub>	Total power dissipation	T <sub>C</sub> =100□	71	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	1.46	□/W

## Silicon NPN Power Transistors

## 2N6216 2N6217

## CHARACTERISTICS

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

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT	
V <sub>CE0(SUS)</sub>	Collector-emitter sustaining voltage	2N6216	I <sub>C</sub> =0.1A ; I <sub>B</sub> =0	150			V
		2N6217		140			
V <sub>CEsat-1</sub>	Collector-emitter saturation voltage	I <sub>C</sub> =4A; I <sub>B</sub> =0.4A			1.2	V	
V <sub>CEsat-2</sub>	Collector-emitter saturation voltage	I <sub>C</sub> =6A; I <sub>B</sub> =0.75A			1.6	V	
V <sub>BEsat</sub>	Base-emitter saturation voltage	I <sub>C</sub> =6A; I <sub>B</sub> =0.75A			2.0	V	
I <sub>CEO</sub>	Collector cut-off current	2N6216			5.0	mA	
		2N6217					V <sub>CE</sub> =70V; I <sub>B</sub> =0
I <sub>CBO</sub>	Collector cut-off current	V <sub>CB</sub> =RatedV <sub>CBO</sub> ; I <sub>E</sub> =0			1.0	mA	
I <sub>EBO</sub>	Emitter cut-off current	V <sub>EB</sub> =7V; I <sub>C</sub> =0			1.0	mA	
h <sub>FE</sub>	DC current gain	I <sub>C</sub> =5A ; V <sub>CE</sub> =5V	20		80		
f <sub>T</sub>	Transition frequency	I <sub>C</sub> =1A ; V <sub>CE</sub> =10V		20		MHz	

Silicon NPN Power Transistors

2N6216 2N6217

PACKAGE OUTLINE

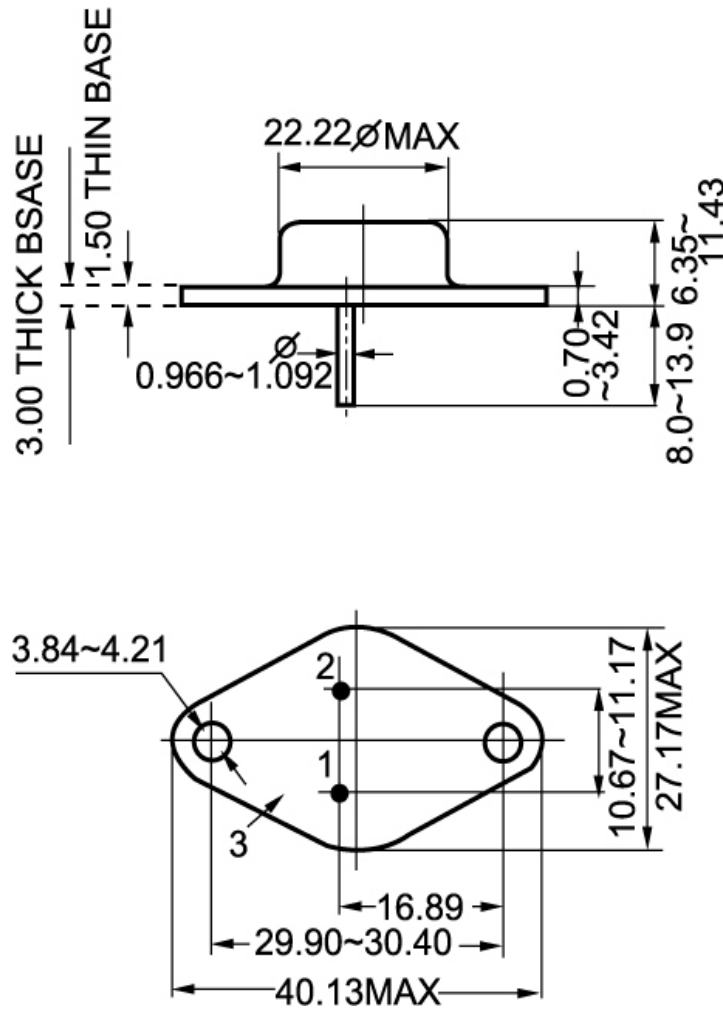


Fig.2 outline dimensions (unindicated tolerance:  $\pm 0.10\text{mm}$ )