

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

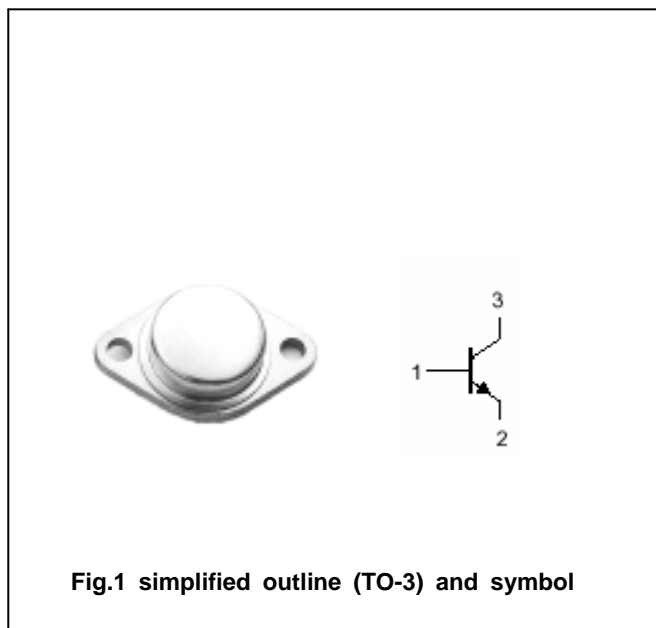


Fig.1 simplified outline (TO-3) and symbol

Absolute maximum ratings(Ta=)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V _{CBO}	Collector-base voltage	2N6216	200	V
		2N6217	180	
V _{CEO}	Collector-emitter voltage	2N6216	150	V
		2N6217	140	
V _{EBO}	Emitter-base voltage	Open collector	7	V
I _C	Collector current		10	A
P _D	Total power dissipation	T _C =100	71	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	1.46	/W

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CHARACTERISTICS

T_j=25 unless otherwise specified

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

PACKAGE OUTLINE

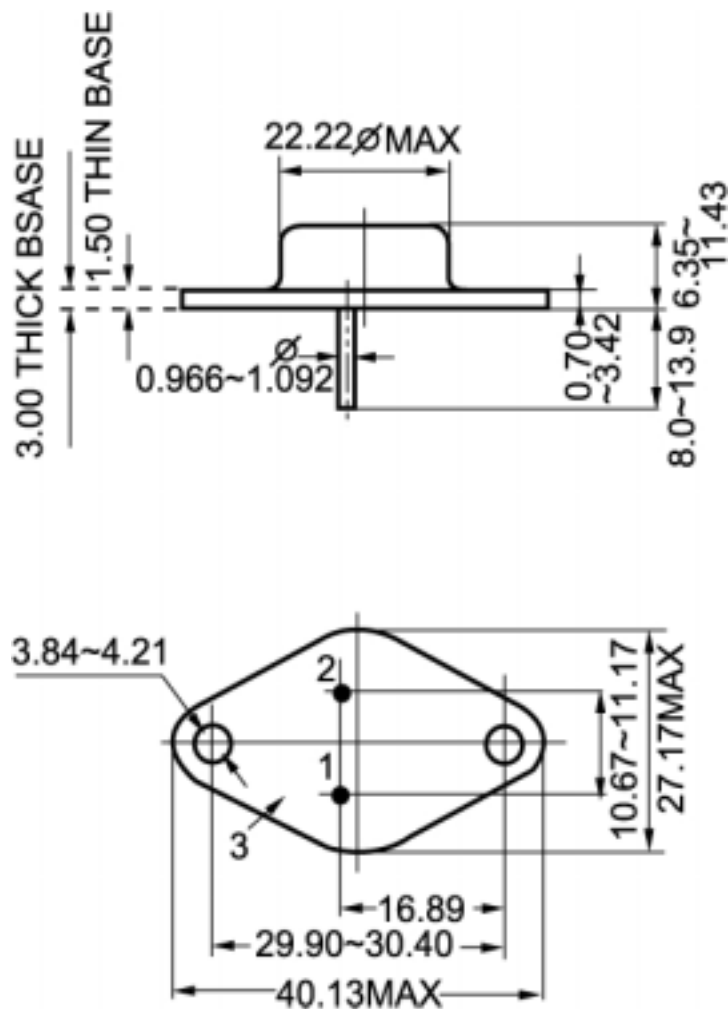


Fig.2 outline dimensions (unindicated tolerance: $\pm 0.10\text{mm}$)