

Silicon NPN Power Transistors

2SD1168

DESCRIPTION

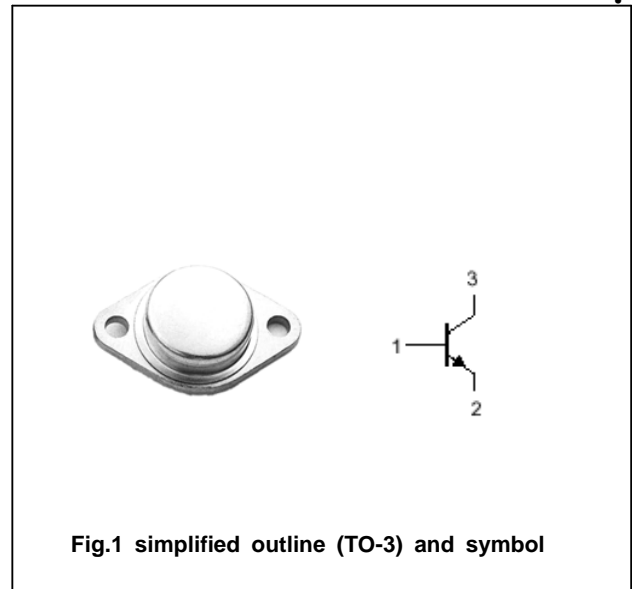
- With TO-3 package
- High voltage ,high speed
- Wide area of safe operation

APPLICATIONS

- For switching regulator applications

PINNING(see fig.2)

PIN	DESCRIPTION
1	Base
2	Emitter
3	Collector

Absolute maximum ratings($T_a = ^\circ\text{C}$)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	Open emitter	1500	V
V_{CEO}	Collector-emitter voltage	Open base	800	V
V_{EBO}	Emitter-base voltage	Open collector	5	V
I_C	Collector current		5	A
I_{CM}	Collector current-peak		10	A
P_C	Collector power dissipation	$T_C = 25^\circ\text{C}$	50	W
T_j	Junction temperature		150	$^\circ\text{C}$
T_{stg}	Storage temperature		-65~150	$^\circ\text{C}$

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CHARACTERISTICS

T_j=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{CER(SUS)}	Collector-emitter sustaining voltage	I _C =5A; R _{BE} =10Ω; L=2mH	800			V
V _{(BR)EBO}	Emitter-base breakdown voltage	I _E =1mA; I _C =0	5			V
V _{CEsat}	Collector-emitter saturation voltage	I _C =2 A; I _B =1A			1.0	V
V _{BESat}	Base-emitter saturation voltage	I _C =2 A; I _B =1A			1.5	V
I _{CBO}	Collector cut-off current	V _{CB} =750V; I _E =0			0.1	mA
		V _{CB} =1500V; I _E =0			1.0	
h _{FE}	DC current gain	I _C =1A; V _{CE} =4V	9		25	
t _f	Fall time	I _C =1.5 A; I _{B1} =0.2A; I _{B2} =-0.7A			0.5	μs
t _s	Storage time			2		μs

◆ h_{FE} Classifications

Q	P
9-18	15-25

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PACKAGE OUTLINE

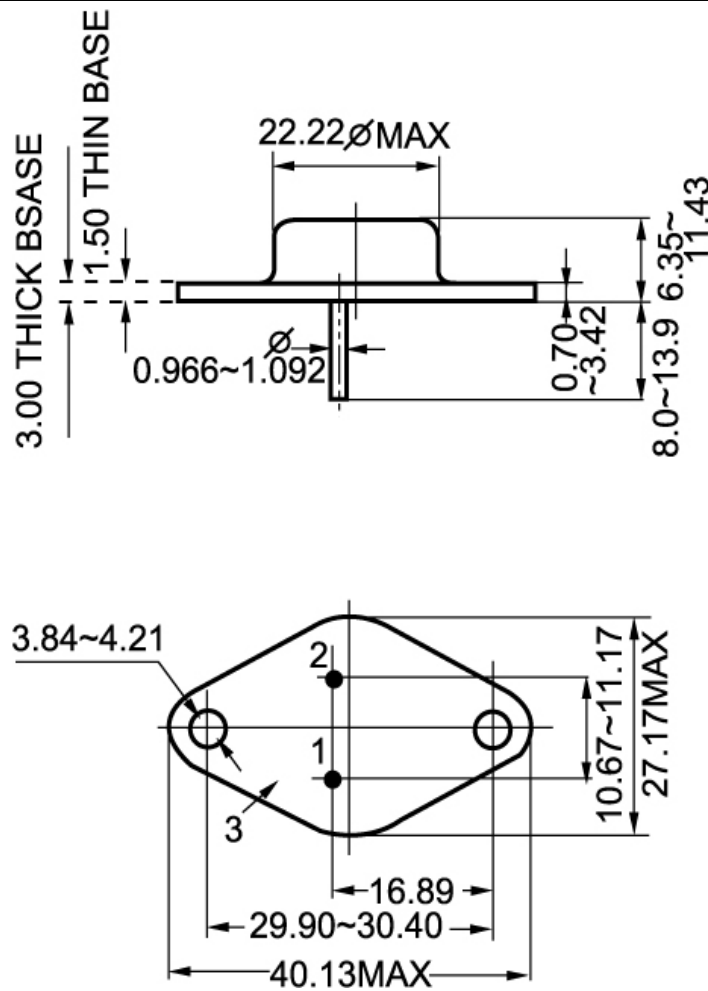


Fig.2 Outline dimensions