

Silicon NPN Power Transistors

BUS12

DESCRIPTION

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- With TO-3 package
- High voltage,high speed

APPLICATIONS

- Designed for switching-mode power supplies ,CRT scanning,inverters, and other industrial applications

PINNING(see fig.2)

PIN	DESCRIPTION
1	Base
2	Emitter
3	Collector

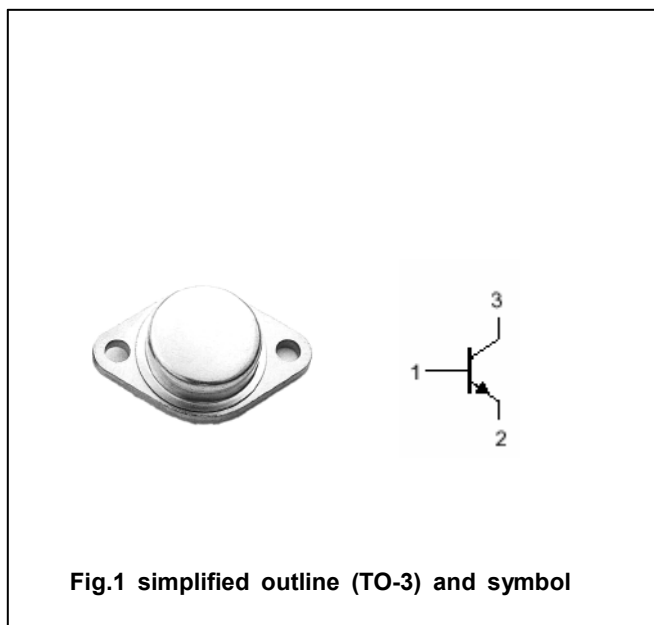


Fig.1 simplified outline (TO-3) and symbol

Absolute maximum ratings ($T_a=25^\circ\text{C}$)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	Open emitter	850	V
V_{CEO}	Collector-emitter voltage	Open base	400	V
V_{EBO}	Emitter-base voltage	Open collector	10	V
I_C	Collector current		8	A
P_T	Total power dissipation	$T_C=25^\circ\text{C}$	125	W
T_j	Junction temperature		200	$^\circ\text{C}$
T_{stg}	Storage temperature		-65~200	$^\circ\text{C}$

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j-c}$	Thermal resistance junction to case	1.17	$^\circ\text{C}/\text{W}$

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CHARACTERISTICS

T_j=25°C unless otherwise specified

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SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{CEQ(SUS)}	Collector-emitter sustaining voltage	I _C =0.1A; L=25mH	400			V
V _{(BR)EBO}	Emitter-base breakdown voltage	I _E =10m A; I _C =0	10			
V _{CEsat-1}	Collector-emitter saturation voltage	I _C =5 A; I _B =1 A			1.5	V
V _{CEsat-2}	Collector-emitter saturation voltage	I _C =8 A; I _B =2.5 A			3.0	V
V _{BEsat-1}	Base-emitter saturation voltage	I _C =5 A; I _B =1 A			1.4	V
V _{BEsat-2}	Base-emitter saturation voltage	I _C =8 A; I _B =2.5 A			1.8	V
I _{CES}	Collector cut-off current	V _{CE} =850V; V _{BE} =0 T _C =125°C			1.0 3.0	mA
I _{EBO}	Emitter cut-off current	V _{EB} =10V; I _C =0			1.0	mA
h _{FE}	DC current gain	I _C =1A ; V _{CE} =5V	15			

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PACKAGE OUTLINE

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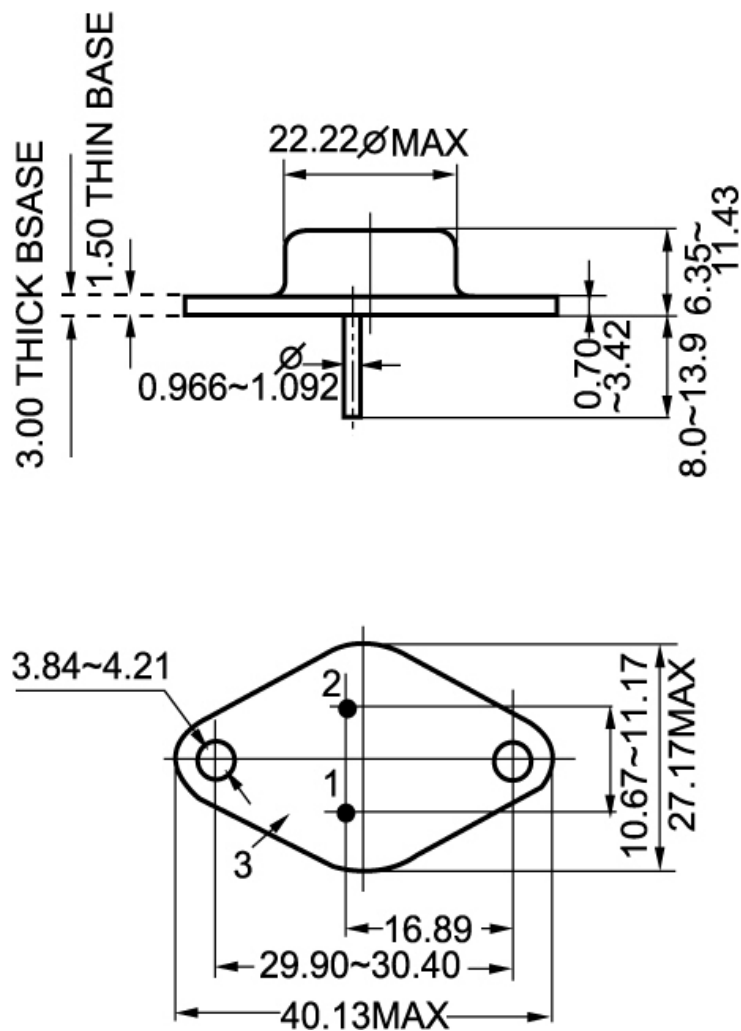


Fig.2 Outline dimensions