

Silicon NPN Power Transistors

BUX37

DESCRIPTION

- With TO-3 package
- High breakdown voltage
- DARLINGTON

APPLICATIONS

- Power switching
- Automotive ignition
- Solenoid drivers
- Series and shunt regulators.

PINNING(see fig.2)

PIN	DESCRIPTION
1	Base
2	Emitter
3	Collector

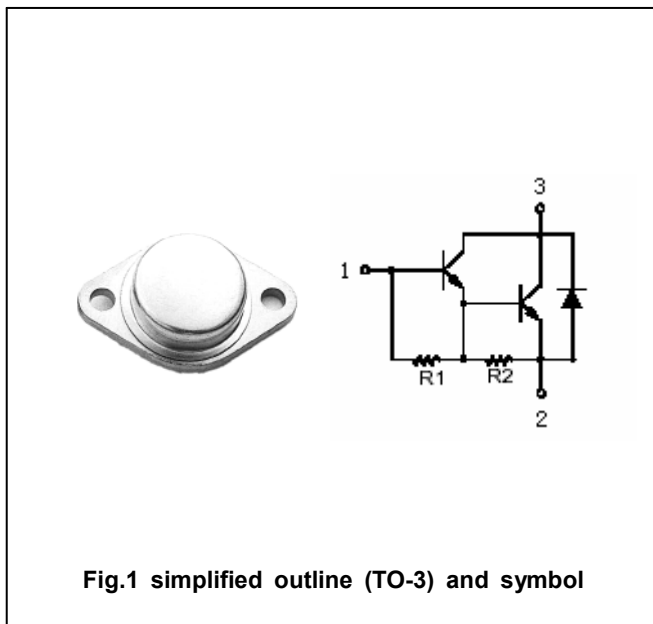


Fig.1 simplified outline (TO-3) and symbol

ABSOLUTE MAXIMUM RATINGS(Ta=25°C)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V _{CBO}	Collector-base voltage	Open emitter	400	V
V _{EBO}	Emitter-base voltage	Open collector	7	V
I _C	Collector current		15	A
I _B	Base current		4	A
P _T	Total power dissipation	T _C ≤100°C	35	W
T _j	Junction temperature		-65~150	°C
T _{stg}	Storage temperature		-65~150	°C

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
R _{th j-c}	Thermal resistance junction to case	1.5	°C/W

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CHARACTERISTICS

T_j=25 °C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{CEQ(SUS)}	Collector-emitter sustaining voltage	I _C =0.1A; I _B =0	400			V
V _{(BR)EBO}	Emitter-base breakdown voltage	I _E =50mA; I _C =0	7			V
V _{CEsat-1}	Collector-emitter saturation voltage	I _C =7 A; I _B =0.07 A			1.5	V
V _{CEsat-2}	Collector-emitter saturation voltage	I _C =10 A; I _B =0.15A			2.0	V
V _{BEsat}	Base-emitter saturation voltage	I _C =10 A; I _B =0.15A			2.7	V
I _{CBO}	Collector cut-off current	V _{CB} =400V; I _E =0			0.1	mA
I _{CEO}	Collector cut-off current	V _{CE} =400V; I _B =0			0.25	mA
h _{FE-1}	DC current gain	I _C =8A ; V _{CE} =5V	100			
h _{FE-2}	DC current gain	I _C =15A ; V _{CE} =5V	20			

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PACKAGE OUTLINE

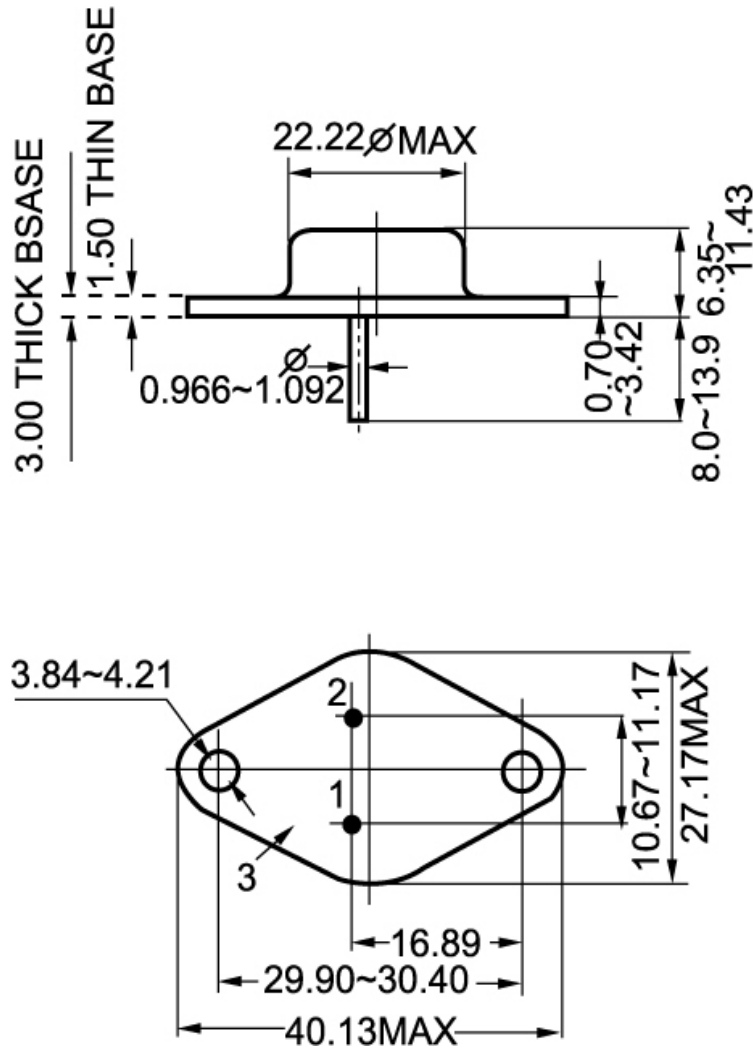


Fig.2 Outline dimensions