

Silicon NPN Power Transistors

BUX37

DESCRIPTION

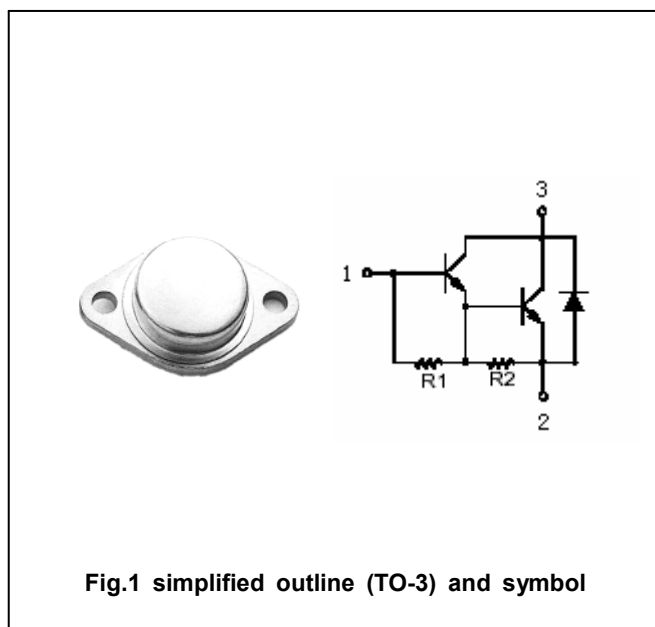
- With TO-3 package
- High breakdown voltage
- DARLINGTON

APPLICATIONS

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

PINNING(see fig.2)

PIN	DESCRIPTION
1	Base
2	Emitter
3	Collector

ABSOLUTE MAXIMUM RATINGS($T_a=25^\circ\text{C}$)

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	$T_C \leq 100^\circ\text{C}$	35	W
T_j	Junction temperature		-65~150	$^\circ\text{C}$
T_{stg}	Storage temperature		-65~150	$^\circ\text{C}$

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j-C}$	Thermal resistance junction to case	1.5	$^\circ\text{C}/\text{W}$

Silicon NPN Power Transistors

BUX37

CHARACTERISTICS

Tj=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	$I_C=7A$; $I_B=0.07A$			1.5	V
$V_{CEsat-2}$	Collector-emitter saturation voltage	$I_C=10A$; $I_B=0.15A$			2.0	V
V_{BEsat}	Base-emitter saturation voltage	$I_C=10A$; $I_B=0.15A$			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			

Silicon NPN Power Transistors

BUX37

PACKAGE OUTLINE

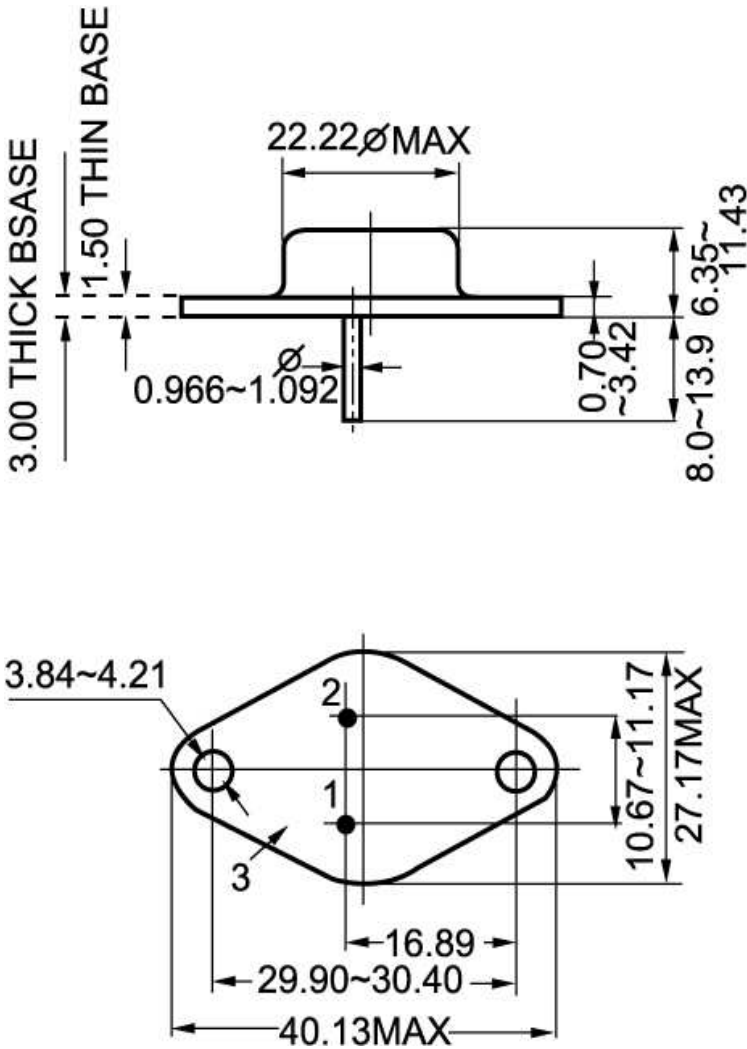


Fig.2 Outline dimensions

This datasheet has been downloaded from:

www.DatasheetCatalog.com

Datasheets for electronic components.