

## Silicon PNP Power Transistors

## BDX66

## DESCRIPTION

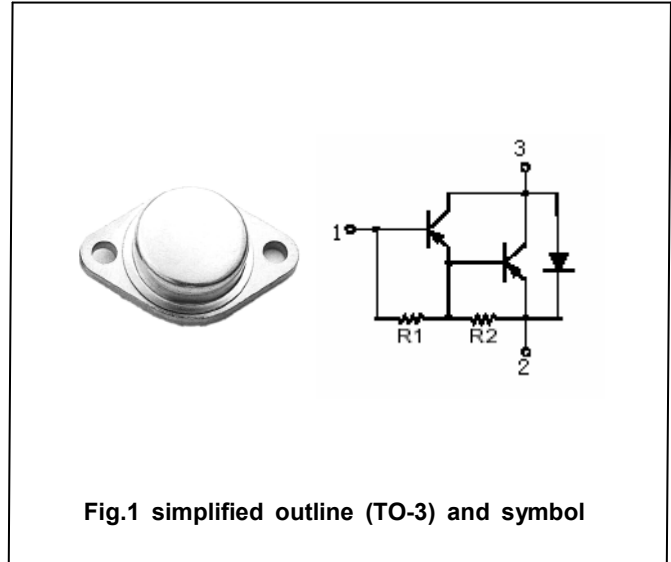
- With TO-3 package
- High current
- DARLINGTON

## APPLICATIONS

- Designed for power amplification and switching applications.

## 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	-60	V
$V_{CEO}$	Collector-emitter voltage	Open base	-60	V
$V_{EBO}$	Emitter-base voltage	Open collector	-5	V
$I_C$	Collector current		-16	A
$I_{CM}$	Collector current(peak)		-20	A
$I_B$	Base current		-0.25	A
$P_T$	Total power dissipation	$T_C=25^\circ\text{C}$	150	W
$T_j$	Junction temperature		-55~200	$^\circ\text{C}$
$T_{stg}$	Storage temperature		-55~200	$^\circ\text{C}$

## THERMAL CHARACTERISTICS

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

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## CHARACTERISTICS

T<sub>j</sub>=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V <sub>CEO(SUS)</sub>	Collector-emitter sustaining voltage	I <sub>C</sub> =-0.1A ; I <sub>B</sub> =0;L=25mH	-60			V
V <sub>CEsat</sub>	Collector-emitter saturation voltage	I <sub>C</sub> =-10A ;I <sub>B</sub> =-40mA			-2	V
I <sub>CBO</sub>	Collector cut-off current	V <sub>CB</sub> =-40V; I <sub>E</sub> =0 T <sub>C</sub> =150°C			-1 -5	mA
I <sub>CEO</sub>	Collector cut-off current	V <sub>CE</sub> =-30V; I <sub>B</sub> =0			-3	mA
I <sub>EBO</sub>	Emitter cut-off current	V <sub>EB</sub> =-5V; I <sub>C</sub> =0			-5	mA

## Switching times

t <sub>on</sub>	Turn-on time	I <sub>C</sub> =-10A ; I <sub>B1</sub> =-I <sub>B2</sub> =0.04A V <sub>CC</sub> =12V ;		1.0		μs
t <sub>off</sub>	Turn-off time			3.5		μs

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PACKAGE OUTLINE

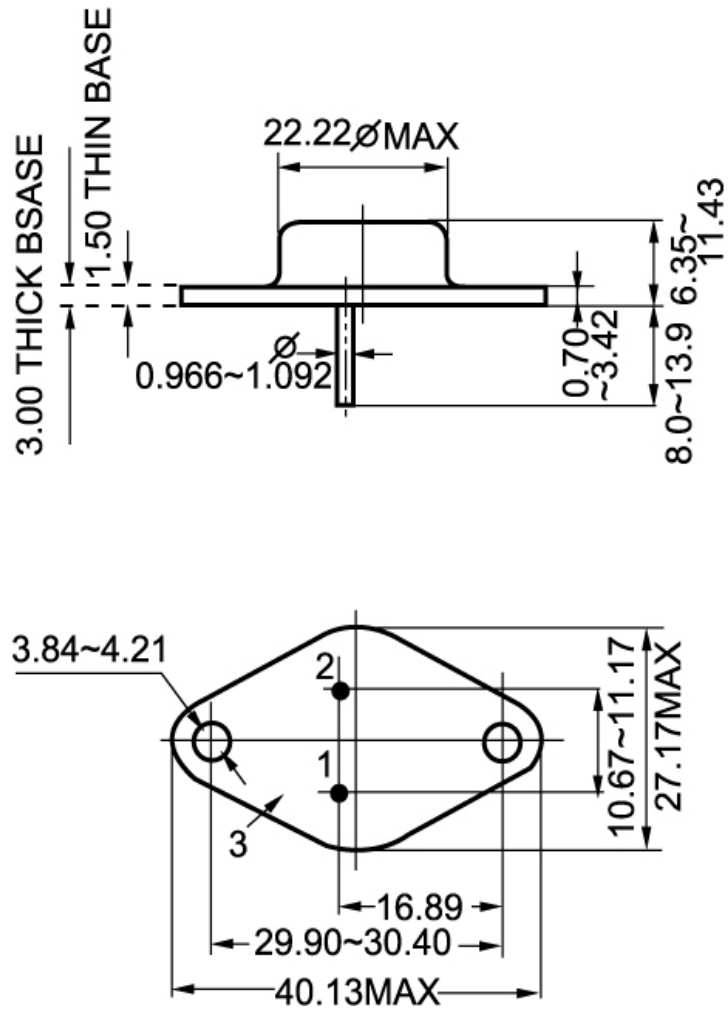


Fig.2 Outline dimensions