

Silicon PNP Power Transistors

BDX18

DESCRIPTION

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- With TO-3 package
- High switching speed

APPLICATIONS

- LF large signal power amplification
- Suitable for series and shunt regulators, high fidelity amplifiers and power switching circuits

PINNING (See Fig.2)

PIN	DESCRIPTION
1	Base
2	Emitter
3	Collector

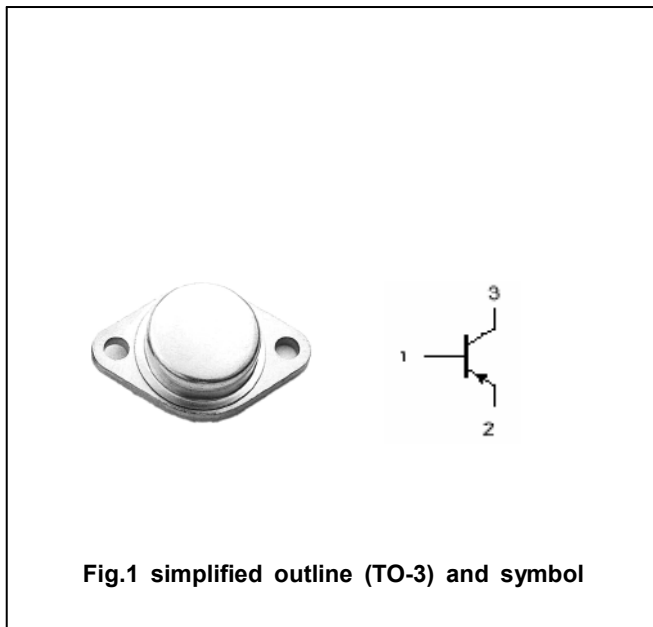


Fig.1 simplified outline (TO-3) and symbol

Absolute maximum ratings(Ta=25°C)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V _{CBO}	Collector-base voltage	Open emitter	-100	V
V _{CEO}	Collector-emitter voltage	Open base	-60	V
V _{EBO}	Emitter-base voltage	Open collector	-7	V
I _C	Collector current		-15	A
I _B	Base current		-7	A
P _T	Total power dissipation	T _C =25°C	117	W
T _j	Junction temperature		-65~200	°C
T _{stg}	Storage temperature		-65~200	°C

THERMAL CHARACTERISTICS

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

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CHARACTERISTICS

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 $T_j=25^\circ\text{C}$ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{CEO(SUS)}$	Collector-emitter sustaining voltage	$I_C=-0.2A ; I_B=0$	-60			V
$V_{(BR) EBO}$	Emitter-base breakdown voltage	$I_E=-1mA ; I_C=0$	-7			V
V_{CEsat}	Collector-emitter saturation voltage	$I_C=-4A ; I_B=-0.4A$			-1.1	V
V_{BE}	Base-emitter voltage	$I_C=-4A ; V_{CE}=-4V$			-1.8	V
I_{CEX}	Collector cut-off current	$V_{CE}=-90V ; V_{BE}=1.5V$ $V_{CE}=-60V ; V_{BE}=1.5V ; T_C=150^\circ\text{C}$			-5 -10	mA
I_{EBO}	Emitter cut-off current	$V_{EB}=-7V ; I_C=0$			-5	mA
h_{FE}	DC current gain	$I_C=-4A ; V_{CE}=-4V$	20		70	
f_T	Transition frequency	$I_C=-1A ; V_{CE}=-10V ; f=1\text{MHz}$		4		MHz

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PACKAGE OUTLINE

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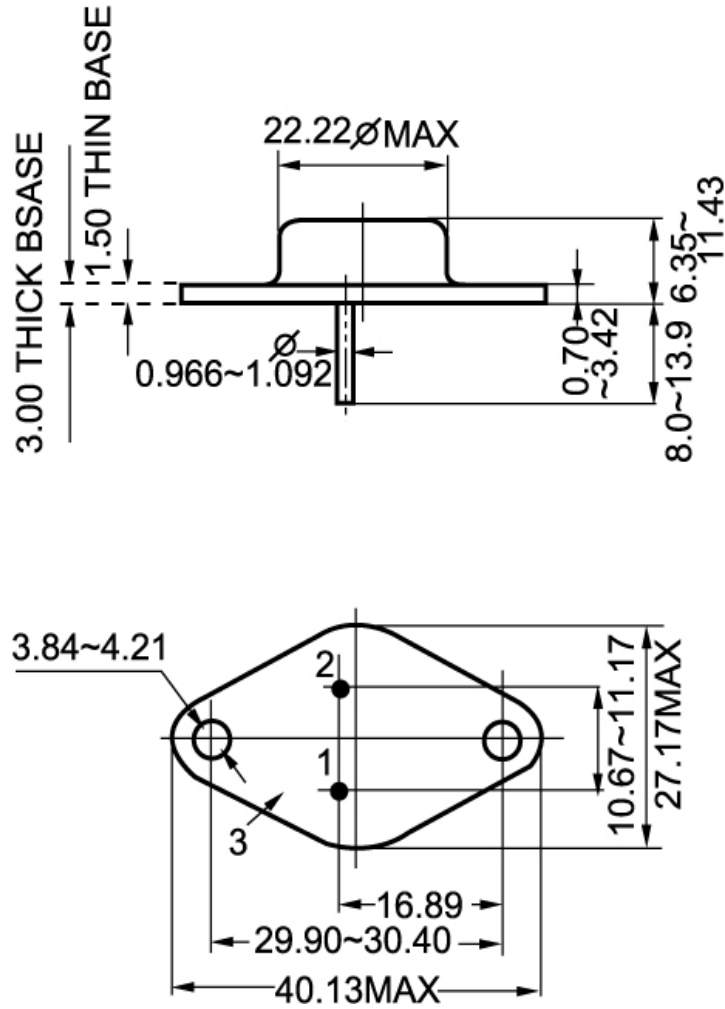


Fig.2 Outline dimensions