

Silicon PNP Power Transistors

BDX18

DESCRIPTION

- 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

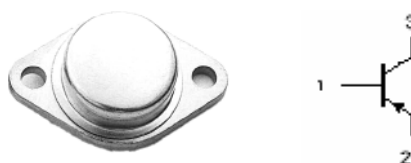


Fig.1 simplified outline (TO-3) and symbol

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

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	$T_C=25^\circ\text{C}$	117	W
T_j	Junction temperature		-65~200	$^\circ\text{C}$
T_{stg}	Storage temperature		-65~200	$^\circ\text{C}$

THERMAL CHARACTERISTICS

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

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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 =-0.2A ; 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°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=1MHz		4		MHz

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PACKAGE OUTLINE

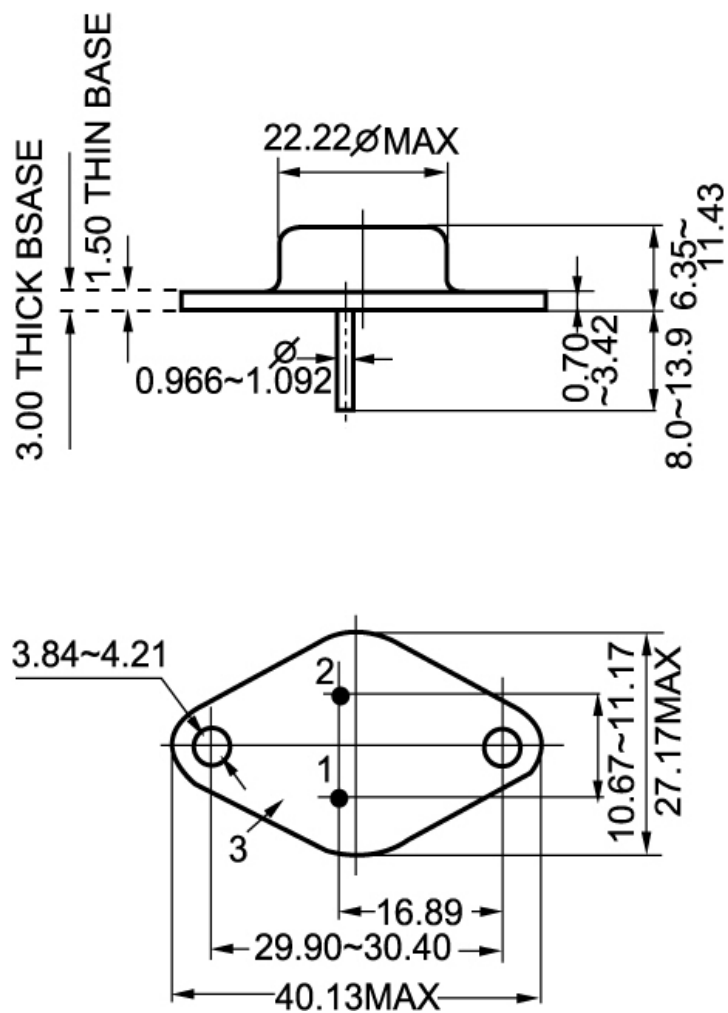


Fig.2 Outline dimensions