

Silicon PNP Power Transistors

BDX18

DESCRIPTION

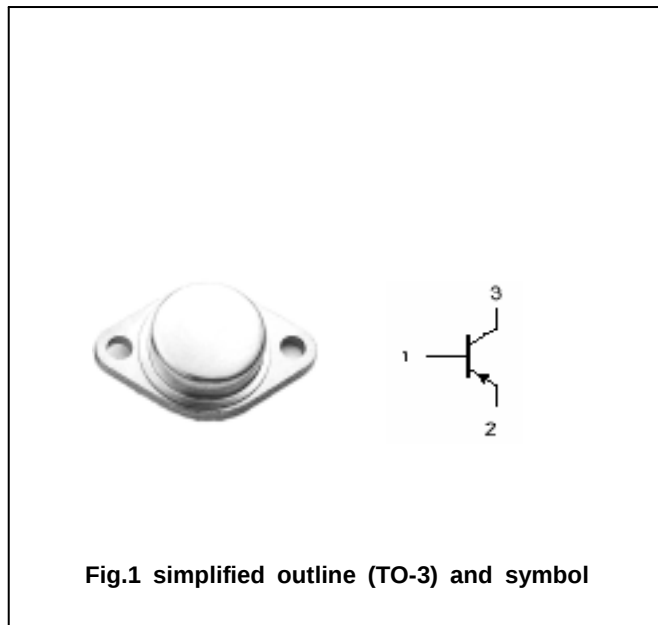
- With TO-3 package
- High switching speed

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

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	$T_C=25$	117	W
T_j	Junction temperature		-65~200	
T_{stg}	Storage temperature		-65~200	

THERMAL CHARACTERISTICS

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

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CHARACTERISTICS

Tj=25 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	$V_{CE} = -90V$; $V_{BE} = 1.5V$ $V_{CE} = -60V$; $V_{BE} = 1.5V$; $T_C = 150$			-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

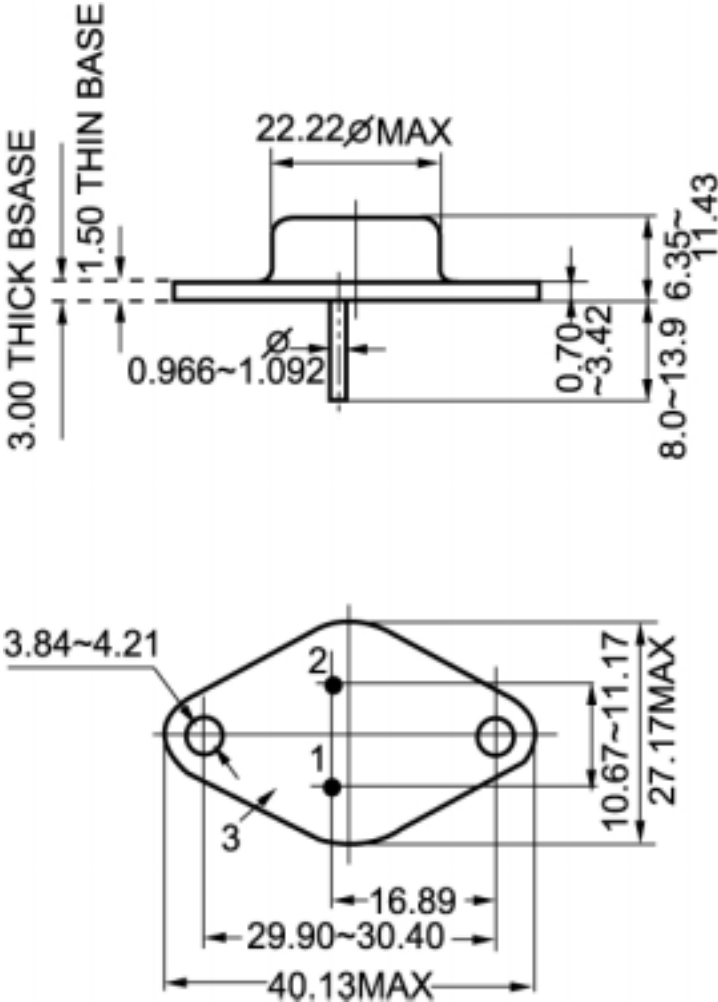


Fig.2 Outline dimensions