

Silicon PNP Power Transistors

BDX64C

DESCRIPTION

- With TO-3 package
- DARLINGTON
- Complement to type BDX65C

APPLICATIONS

- Designed for power amplification and switching applications.

PINNING (See Fig.2)

PIN	DESCRIPTION
1	Base
2	Emitter
3	Collector

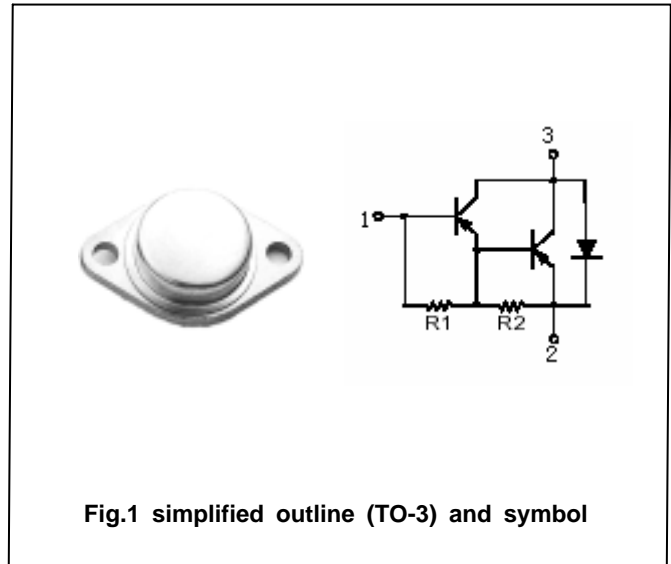


Fig.1 simplified outline (TO-3) and symbol

Absolute maximum ratings(Ta=25 )

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
$V_{CBO}$	Collector-base voltage	Open emitter	-120	V
$V_{CEO}$	Collector-emitter voltage	Open base	-120	V
$V_{EBO}$	Emitter-base voltage	Open collector	-5	V
$I_C$	Collector current		-12	A
$I_{CM}$	Collector current(peak)		-16	A
$I_B$	Base current		-0.2	A
$P_T$	Total power dissipation	$T_C=25$	117	W
$T_j$	Junction temperature		-55~200	
$T_{stg}$	Storage temperature		-55~200	

THERMAL CHARACTERISTICS

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

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## CHARACTERISTICS

T<sub>j</sub>=25 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	-120			V
V <sub>CEsat</sub>	Collector-emitter saturation voltage	I <sub>C</sub> =-5A ; I <sub>B</sub> =-20mA			-2	V
V <sub>BE</sub>	Base-emitter on voltage	I <sub>C</sub> =-5A;V <sub>CE</sub> =-3V			-2.5	V
I <sub>CBO</sub>	Collector cut-off current	V <sub>CB</sub> =-120V; I <sub>E</sub> =0 T <sub>C</sub> =150			-0.2 -2	mA
I <sub>CEO</sub>	Collector cut-off current	V <sub>CE</sub> =-60V; I <sub>B</sub> =0			-1	mA
I <sub>EBO</sub>	Emitter cut-off current	V <sub>EB</sub> =-5V; I <sub>C</sub> =0			-5	mA
V <sub>F</sub>	Diode forward voltage	I <sub>F</sub> =-5A		-1.8		V
h <sub>FE-1</sub>	DC current gain	I <sub>C</sub> =-1A ; V <sub>CE</sub> =-3V		1500		
h <sub>FE-2</sub>	DC current gain	I <sub>C</sub> =-5A ; V <sub>CE</sub> =-3V	1000			
h <sub>FE-3</sub>	DC current gain	I <sub>C</sub> =-12A ; V <sub>CE</sub> =-3V		750		
f <sub>T</sub>	Transition frequency	I <sub>C</sub> =-5A ; V <sub>CE</sub> =-3V;f=1MHz		7		MHz

PACKAGE OUTLINE

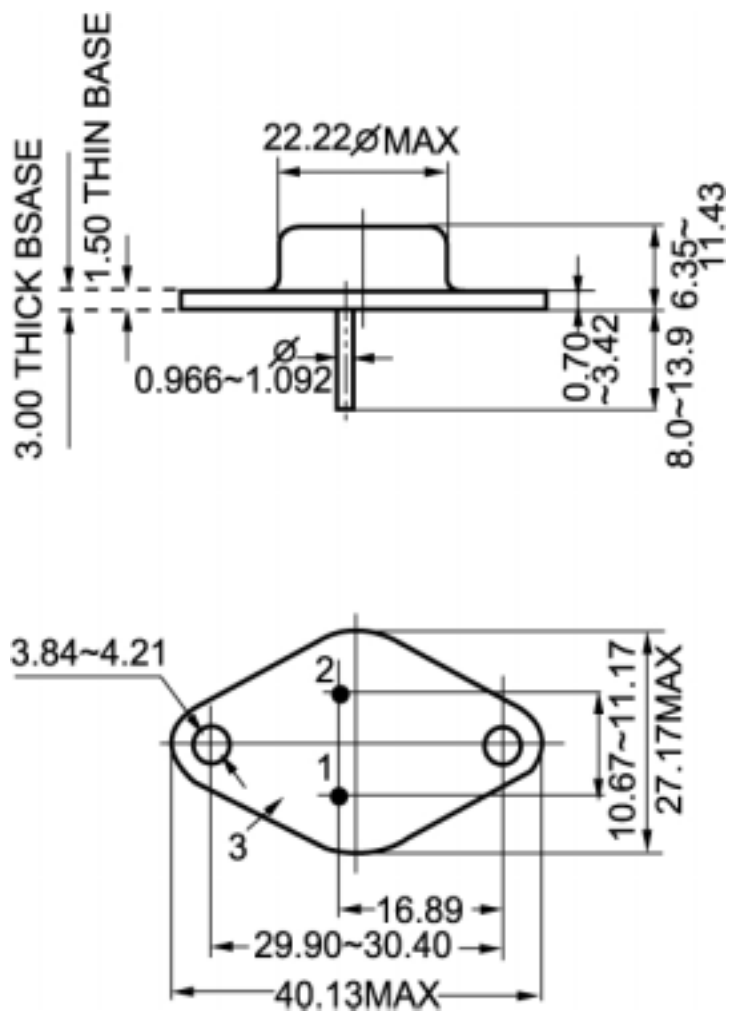


Fig.2 Outline dimensions