Silicon PNP Power Transistors BDX64C

DESCRIPTION

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

APPLICATIONS

·Designed for power amplification and switching applications.

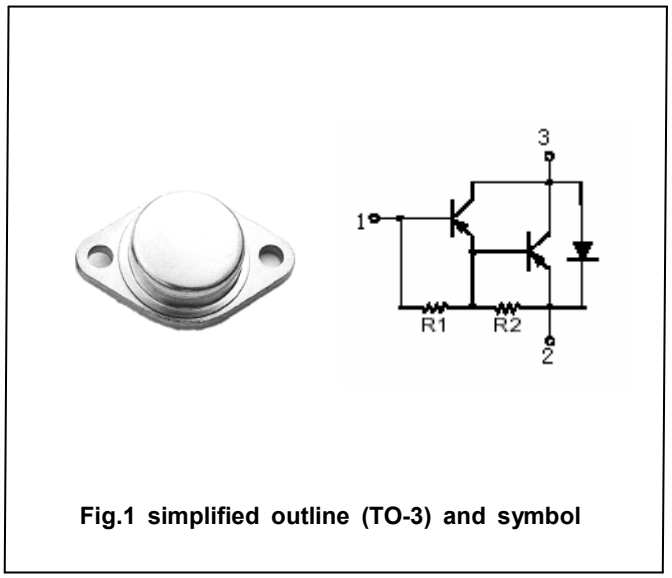

Fig.1 simplified outline (TO-3) and symbol

PINNING (See Fig.2)

PIN	DESCRIPTION
1	Base
2	Emitter
3	Collector

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
$R_{th\ j\text{-}c}$	Thermal resistance from junction to case	1.5	□/W

CHARACTERISTICS

Tj=25□ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{CEO(SUS)}$	Collector-emitter sustaining voltage	I_C=-0.1A ; I_B=0;L=25mH	-120			V
V_{CEsat}	Collector-emitter saturation voltage	I_C=-5A ;I_B=-20mA			-2	V
V_{BE}	Base-emitter on voltage	I_C=-5A;V_{CE}=-3V			-2.5	V
I_{CBO}	Collector cut-off current	V_{CB}=-120V; I_E=0 T_C=150□			-0.2 -2	mA
I_{CEO}	Collector cut-off current	V_{CE}=-60V; I_B=0			-1	mA
I_{EBO}	Emitter cut-off current	V_{EB}=-5V; I_C=0			-5	mA
V_F	Diode forward voltage	I_F=-5A		-1.8		V
h_{FE-1}	DC current gain	I_C=-1A ; V_{CE}=-3V		1500		
h_{FE-2}	DC current gain	I_C=-5A ; V_{CE}=-3V	1000			
h_{FE-3}	DC current gain	I_C=-12A ; V_{CE}=-3V		750		
f_T	Transition frequency	I_C=-5A ; V_{CE}=-3V;f=1MHz		7		MHz

PACKAGE OUTLINE

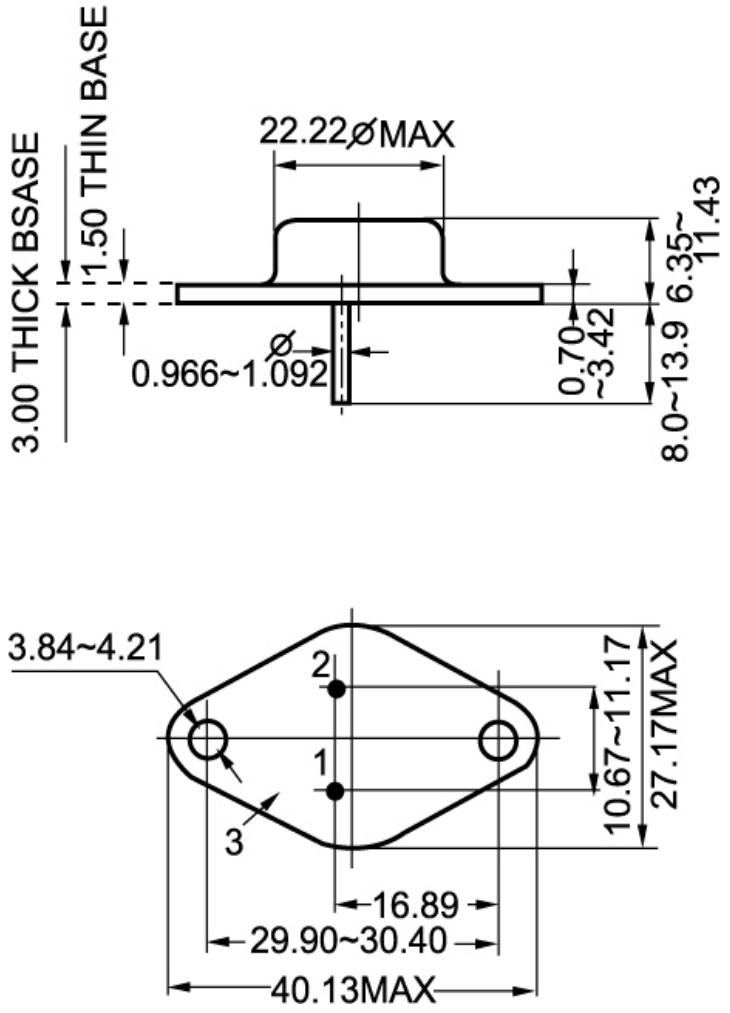

Fig.2 Outline dimensions