Silicon NPN Power Transistors BDX67B

DESCRIPTION

·With TO-3 package
·High current capability
·DARLINGTON

APPLICATIONS

·Designed for power amplification and switching application.

PINNING (See Fig.2)

PIN	DESCRIPTION
1	Base
2	Emitter
3	Collector

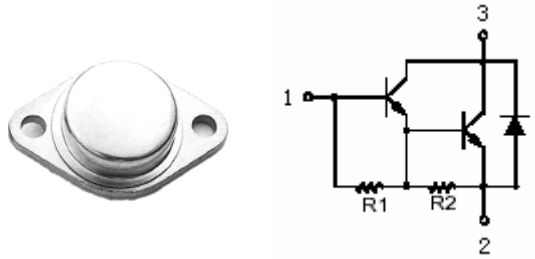

Fig.1 simplified outline (TO-3) and symbol

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	100	V
V_{EBO}	Emitter-base voltage	Open collector	5	V
I_C	Collector current		16	A
I_{CM}	Collector current(peak)		20	A
I_B	Base current		0.25	A
P_T	Total power dissipation	T_C=25□	117	W
T_j	Junction temperature		150	□
T_{stg}	Storage temperature		-55~200	□

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j\text{-}c}$	Thermal resistance from junction to case	1.17	□/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	100			V
V_{CEsat}	Collector-emitter saturation voltage	I_C=10A ;I_B=0.04A			2	V
I_{CBO}	Collector cut-off current	V_{CB}=60V; I_E=0 T_C=150□			1 5	mA
I_{CEO}	Collector cut-off current	V_{CE}=50V; I_B=0			3	mA
I_{EBO}	Emitter cut-off current	V_{EB}=5V; I_C=0			3	mA
Switching times						
t_{on}	Turn-on time	I_C=-10A ; I_{B1}=-I_{B2}=0.04A V_{CC}=12V ;		1.0		μs
t_{off}	Turn-off time			3.5		μs

PACKAGE OUTLINE

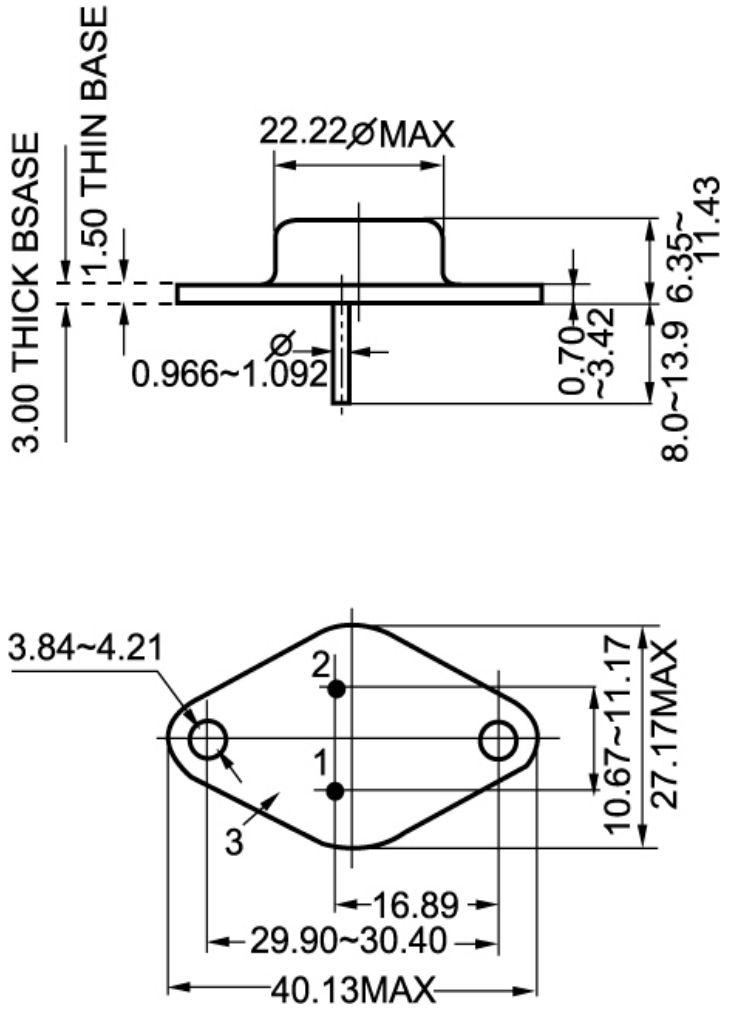

Fig.2 Outline dimensions