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(Ta=25□)

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
$R_{th\ j\text{-}c}$	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=-0.2A ; 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

PACKAGE OUTLINE

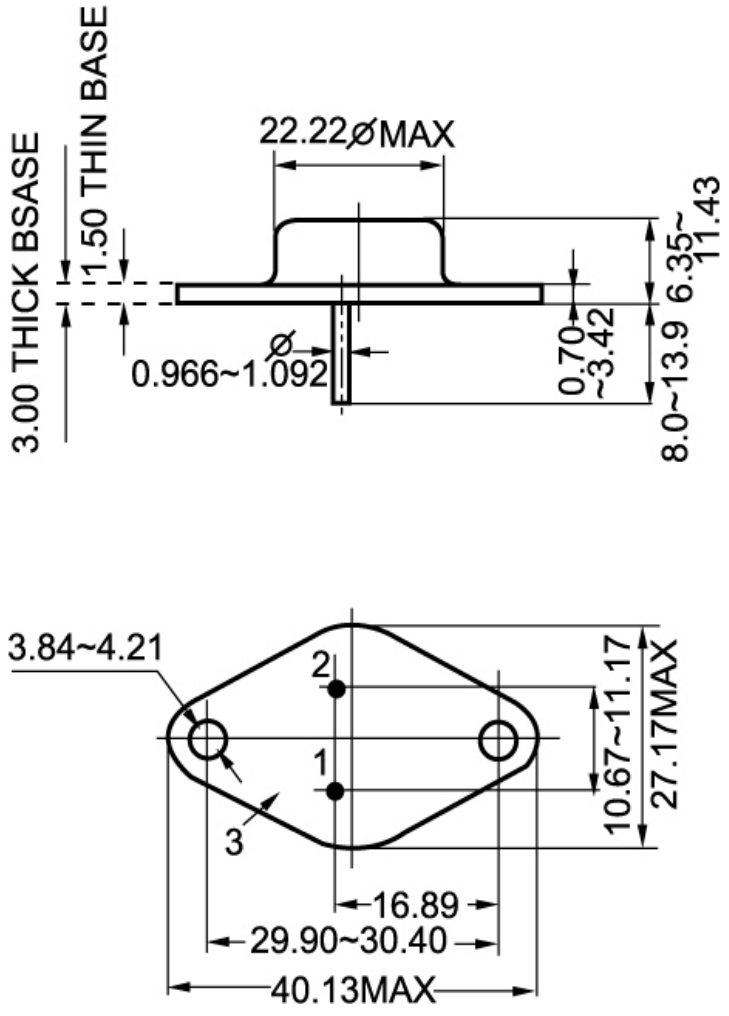

Fig.2 Outline dimensions