Silicon PNP Power Transistors BD312

DESCRIPTION

- ·With TO-3 package
- ·High DC current gain
- ·Excellent safe operating area
- ·Complement to type BD311

APPLICATIONS

- ·Designed for power amplifier 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	-60	V
V_{CEO}	Collector-emitter voltage	Open base	-60	V
V_{EBO}	Emitter-base voltage	Open collector	-5	V
I_C	Collector current		-10	A
I_{CM}	Collector current(peak)		-20	A
I_B	Base current		-4	A
P_T	Total power dissipation	T_C=25℃	115	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	1.52	℃/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_{CEsat}	Collector-emitter saturation voltage	I_C=-5A ;I_B=-0.5A			-1.0	V
V_{BEsat}	Base-emitter saturation voltage	I_C=-5A ;I_B=-0.5A			-1.8	V
V_{BE}	Base-emitter on voltage	I_C=-5A ;V_{CE}=-4V			-1.5	V
I_{CBO}	Collector cut-off current	V_{CB}=rated;I_E=0			-1.0	mA
I_{EBO}	Emitter cut-off current	V_{EB}=-7V; I_C=0			-1.0	mA
h_{FE-1}	DC current gain	I_C=-5A ; V_{CE}=-4V	25			
h_{FE-2}	DC current gain	I_C=-10A ; V_{CE}=-4V	5			
f_T	Transition frequency	I_C=-0.5A ; V_{CE}=-10V,f=1MHz	4			MHz

PACKAGE OUTLINE

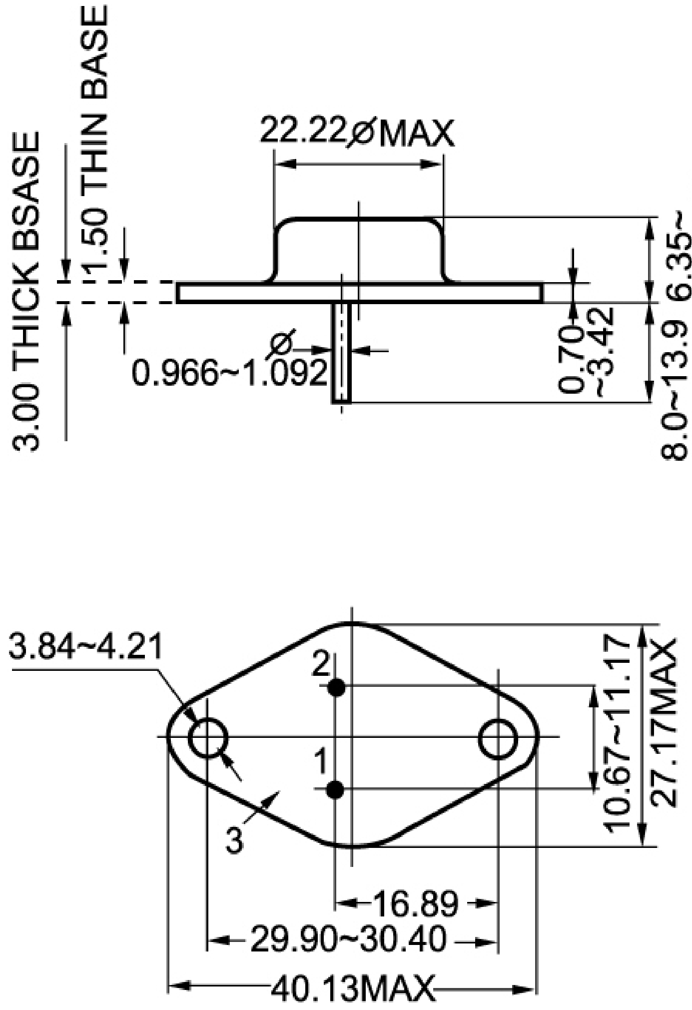

Fig.2 Outline dimensions