Silicon NPN Power Transistors BD317

DESCRIPTION

- With TO-3 package
- High DC current gain
- Excellent safe operating area
- Complement to type BD318

APPLICATIONS

- Designed for high power amplifiers

PINNING (See Fig.2)

PIN	DESCRIPTION
1	Base
2	Emitter
3	Collector

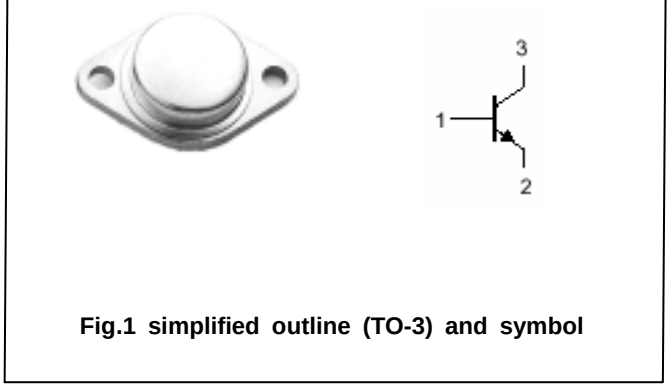

Fig.1 simplified outline (TO-3) and symbol

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	100	V
V_{EBO}	Emitter-base voltage	Open collector	7	V
I_C	Collector current		16	A
I_{CM}	Collector current(peak)		20	A
I_B	Base current		5	A
P_D	Total power dissipation	T_C=25℃	200	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	0.875	℃/W

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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	100			V
V_{CEsat}	Collector-emitter saturation voltage	I_C=8A ;I_B=0.8A			1.0	V
V_{BEsat}	Base-emitter saturation voltage	I_C=8A ;I_B=0.8A			1.8	V
$V_{BE(on)}$	Base-emitter on voltage	I_C=8A ;V_{CE}=2.0V			1.5	V
I_{CBO}	Collector cut-off current	V_{CB}=100V;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	15			
f_T	Transition frequency	I_C=1A ; V_{CE}=20V,f=0.5MHz	1.0			MHz

PACKAGE OUTLINE

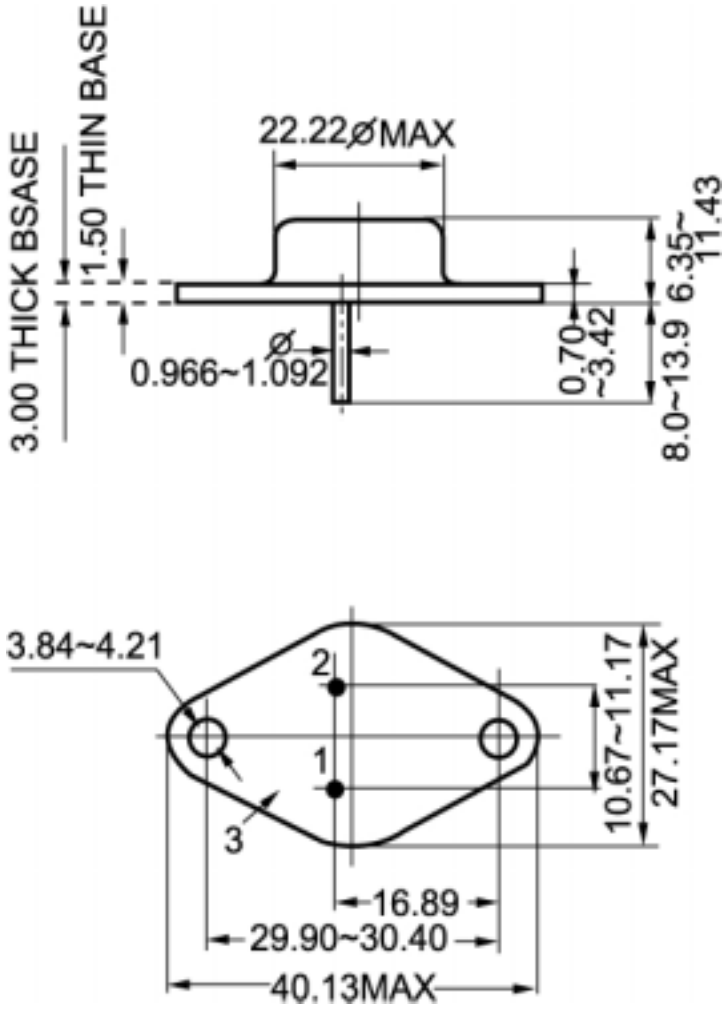

Fig.2 Outline dimensions