

Silicon NPN Power Transistors

BD317

DESCRIPTION

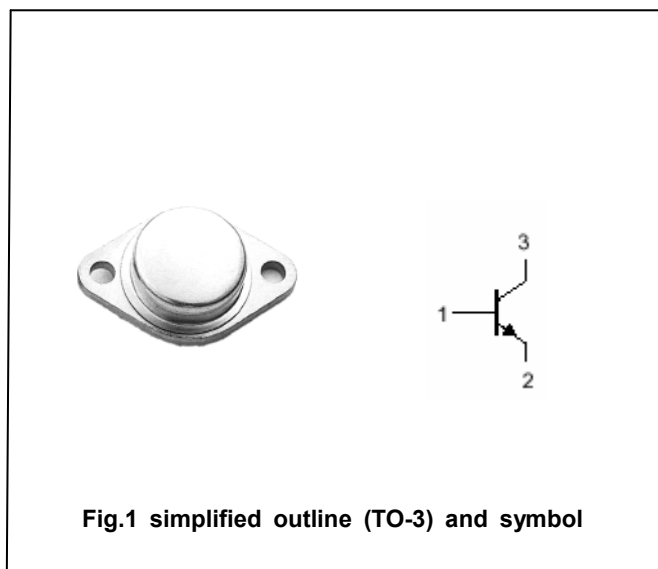
- With TO-3 package
- High DC current gain
- Excellent safe operating area
- Complement to type BD318

APPLICATIONS

- Designed for high power amplifiers

PINNING (See Fig.2)

PIN	DESCRIPTION
1	Base
2	Emitter
3	Collector

Absolute maximum ratings($T_a=25^\circ\text{C}$)

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	$T_C=25^\circ\text{C}$	200	W
T_j	Junction temperature		-65~200	$^\circ\text{C}$
T_{stg}	Storage temperature		-65~200	$^\circ\text{C}$

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j-c}$	Thermal resistance from junction to case	0.875	$^\circ\text{C}/\text{W}$

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CHARACTERISTICS

T_j=25°C 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

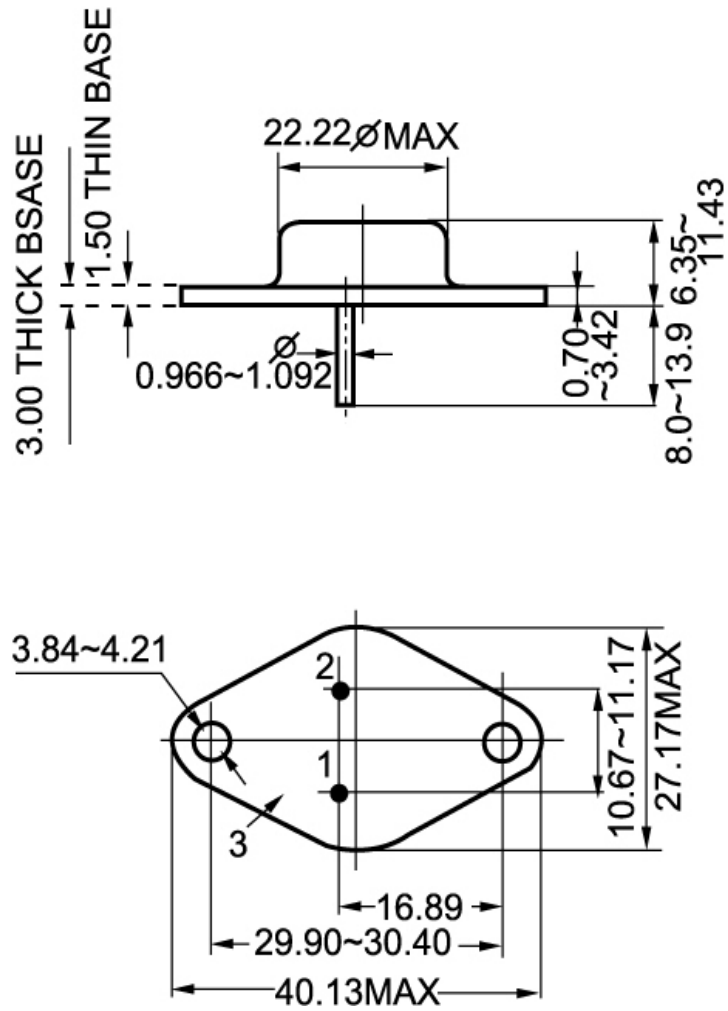


Fig.2 Outline dimensions