

Silicon PNP Power Transistors

BD318

DESCRIPTION

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- With TO-3 package
- High DC current gain
- Excellent safe operating area
- Complement to type BD317

APPLICATIONS

- Designed for high power amplifiers

PINNING (See Fig.2)

PIN	DESCRIPTION
1	Base
2	Emitter
3	Collector

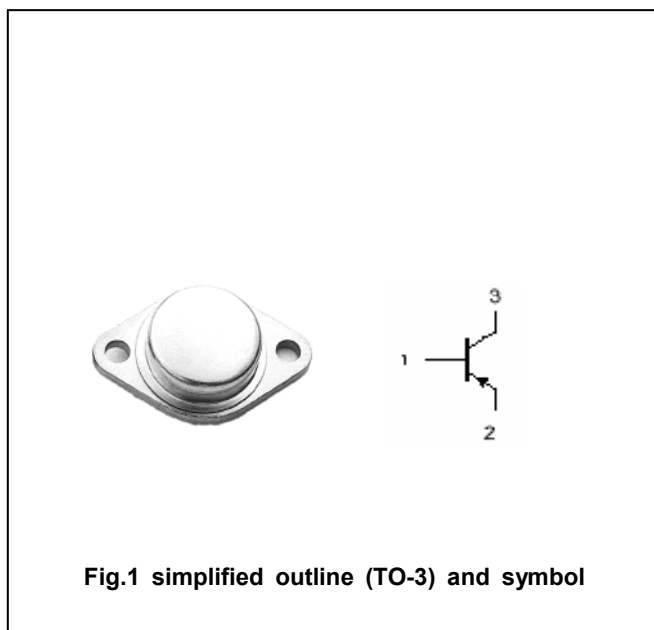


Fig.1 simplified outline (TO-3) and symbol

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

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_T	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

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 $T_j=25^\circ\text{C}$ 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	$I_C=-1A ; V_{CE}=-20V, f=0.2\text{MHz}$	1			MHz

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PACKAGE OUTLINE

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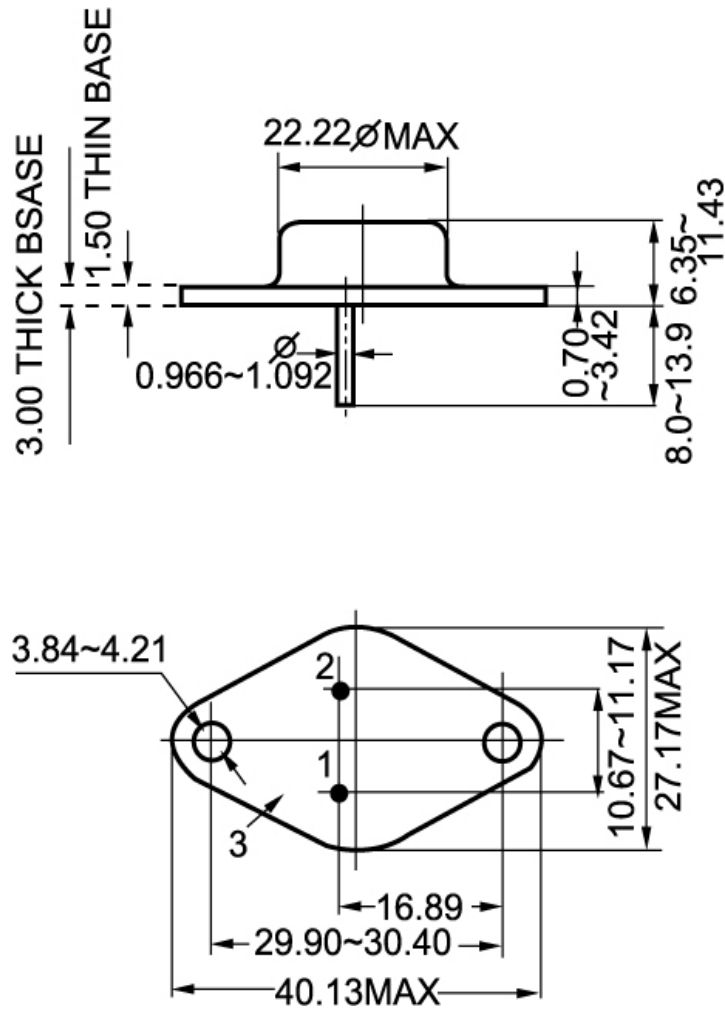


Fig.2 Outline dimensions