

Silicon PNP Power Transistors

BD231

DESCRIPTION

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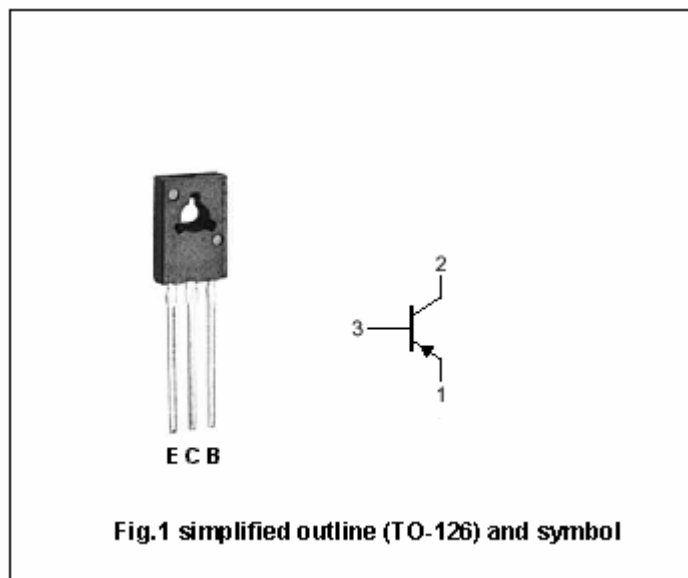
- With TO-126 package
- Complement to type BD230
- High current (Max:-1.5A)
- Low voltage (Max: -80V)

APPLICATIONS

- Drive stage in TV circuits

PINNING

PIN	DESCRIPTION
1	Emitter
2	Collector;connected to mounting base
3	Base

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	-80	V
V_{EBO}	Emitter-base voltage	Open collector	-5	V
I_C	Collector current (DC)		-1.5	A
I_{CM}	Collector current-Peak		-3	A
I_{BM}	Base current-Peak		-1	A
P_D	Total power dissipation	$T_{mb} \leq 62^\circ\text{C}$	12.5	W
P_D	Total power dissipation	$T_C = 25^\circ\text{C}$	10	W
T_j	Junction temperature		150	$^\circ\text{C}$
T_{stg}	Storage temperature		-65~150	$^\circ\text{C}$
T_{amb}	Operating ambient temperature		-65~150	$^\circ\text{C}$

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CHARACTERISTICS

T_j=25°C unless otherwise specified

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SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{CEsat}	Collector-emitter saturation voltage	I _C =-1A; I _B =-0.1A			-0.8	V
V _{BEsat}	Base-emitter saturation voltage	I _C =-1A; I _B =-0.1A			-1.1	V
V _{BE}	Base-emitter on voltage	I _C =-1A; V _{CE} =-2V			-1.3	V
I _{CBO}	Collector cut-off current	V _{CB} =-30V; I _E =0			-0.1	μA
I _{EBO}	Emitter cut-off current	V _{EB} =-5V; I _C =0			-0.1	μA
h _{FE-1}	DC current gain	I _C =-5mA; V _{CE} =-2V	40			
h _{FE-2}	DC current gain	I _C =-150mA; V _{CE} =-2V	40		250	
h _{FE-3}	DC current gain	I _C =-1A; V _{CE} =-2V	25			
f _T	Transition frequency	I _C =-50mA; V _{CE} =-5V		50		MHz

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PACKAGE OUTLINE

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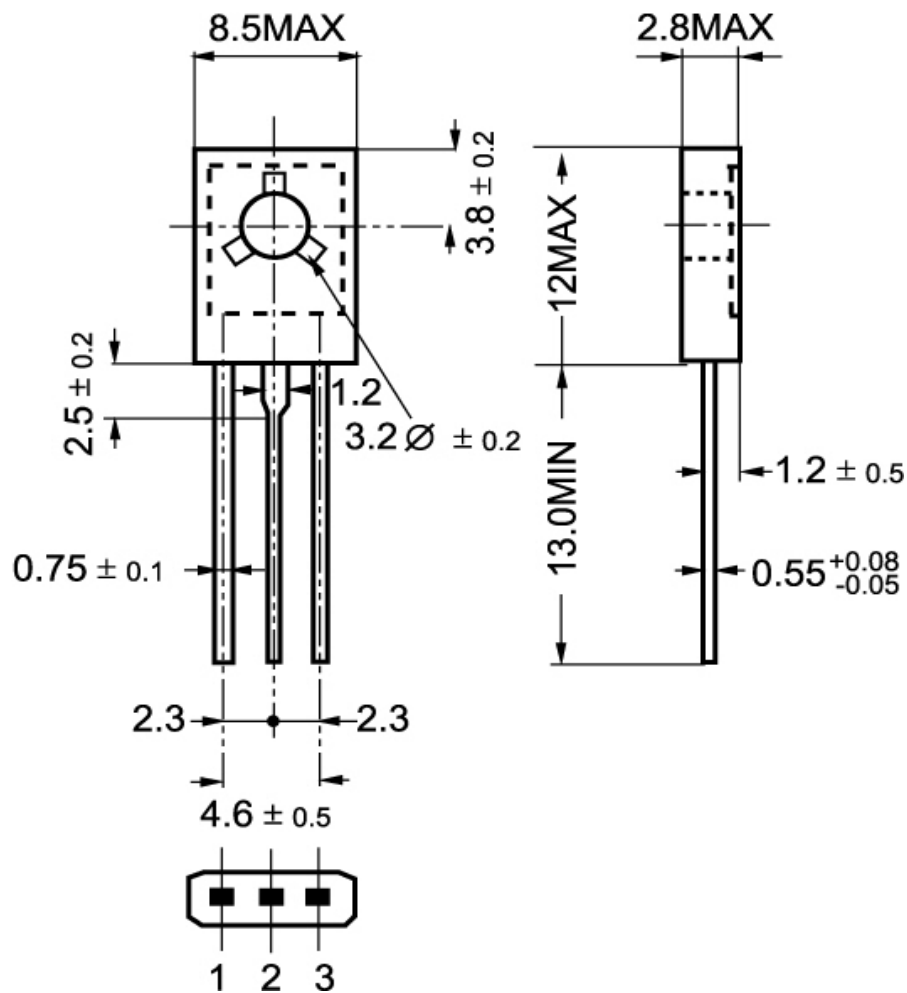


Fig.2 Outline dimensions