

Silicon PNP Power Transistors

BD231

DESCRIPTION

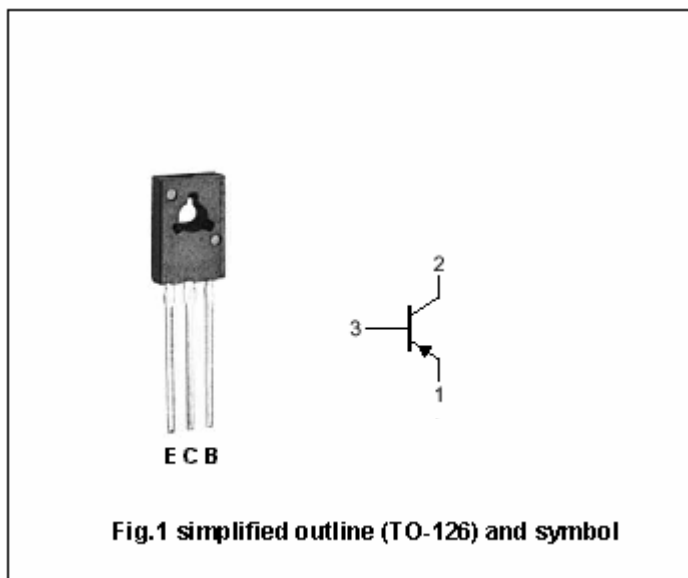
- With TO-126 package
- Complement to type BD230
- High current (Max:-1.5A)
- Low voltage (Max: -80V)

APPLICATIONS

- Drive stage in TV circuits

PINNING

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



Absolute maximum ratings (Ta=25)

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} 62	12.5	W
P _D	Total power dissipation	T _C =25	10	W
T _j	Junction temperature		150	
T _{stg}	Storage temperature		-65~150	
T _{amb}	Operating ambient temperature		-65~150	

Silicon PNP Power Transistors

BD231

CHARACTERISTICS

 $T_j=25$ unless otherwise specified

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

Silicon PNP Power Transistors

BD231

PACKAGE OUTLINE

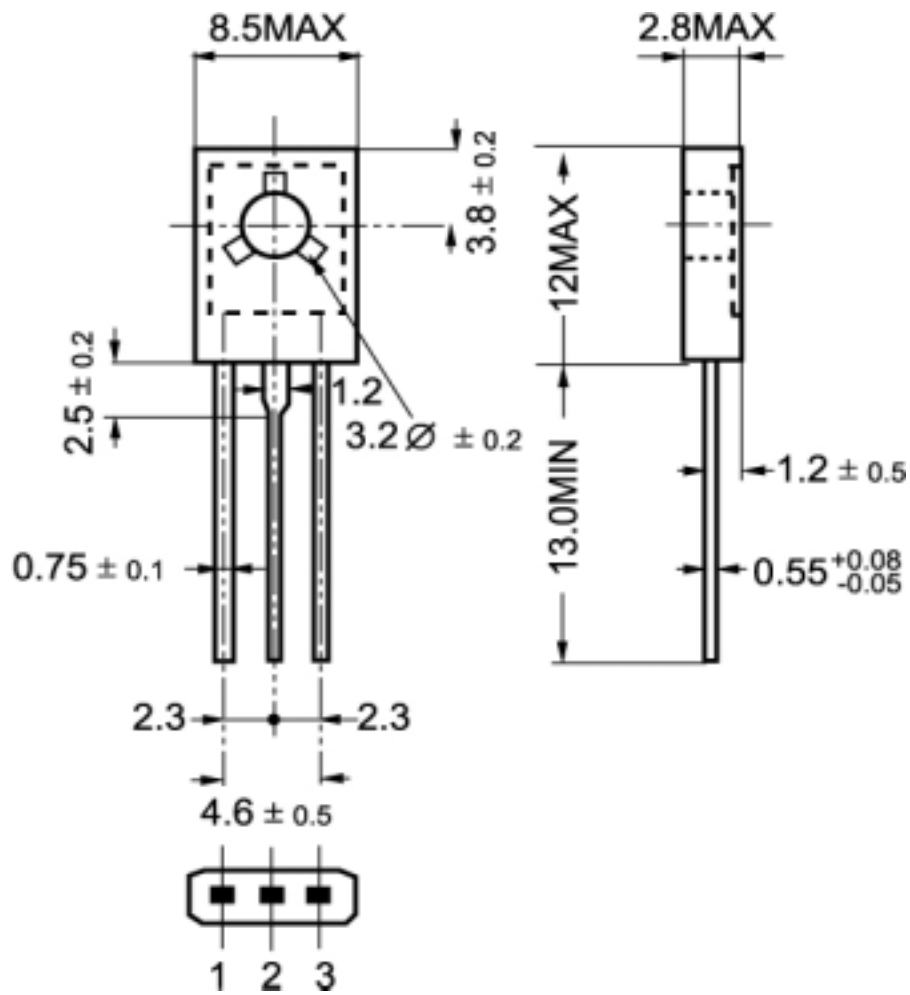


Fig.2 Outline dimensions