Silicon NPN Power Transistors BD230

DESCRIPTION

- With TO-126 package
- Complement to type BD231
- High current (Max:1.5A)
- Low voltage (Max: 80V)

APPLICATIONS

- Drive stage in TV circuits

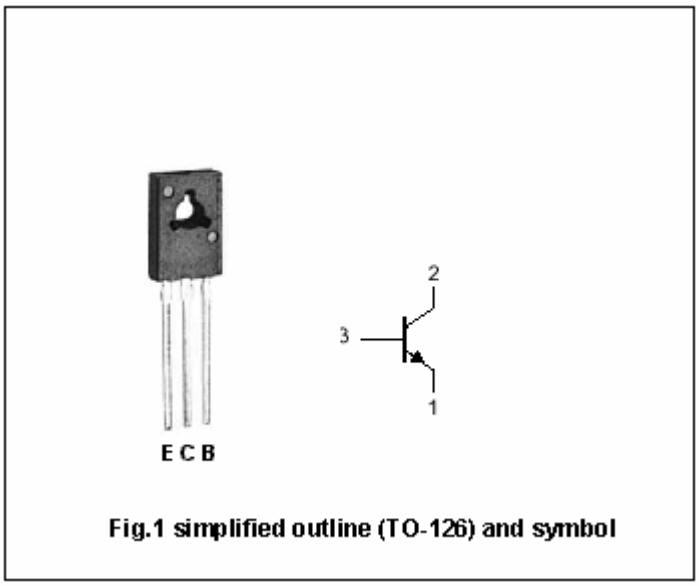

Fig.1 simplified outline (TO-126) and symbol

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	$T_{mb}\leq 62℃$	12.5	W
		$T_C=25℃$	10	
T_j	Junction temperature		150	℃
T_{stg}	Storage temperature		-65~150	℃
T_{amb}	Operating ambient temperature		-65~150	℃

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CHARACTERISTICS

Tj=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			1.2	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		125		MHz

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PACKAGE OUTLINE

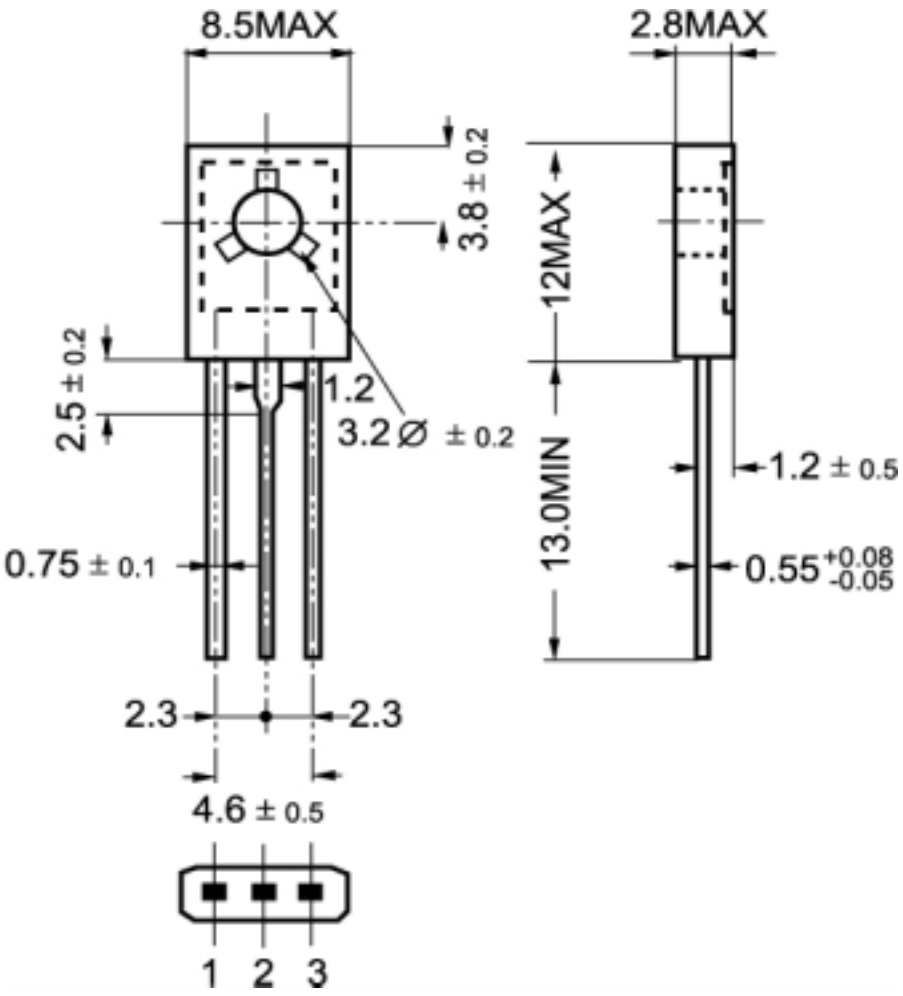

Fig.2 Outline dimensions