

**Silicon PNP Power Transistors**

**BD234 BD236 BD238**

**DESCRIPTION**

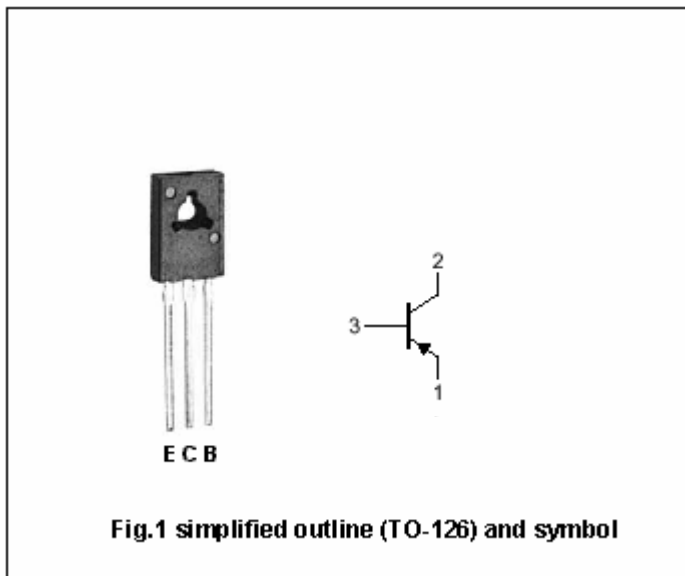
- With TO-126 package
- Complement to type BD233/235 /237

**APPLICATIONS**

- For medium power linear and switching applications

**PINNING**

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



**Absolute maximum ratings (Ta=25°C)**

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V <sub>CB0</sub>	Collector-base voltage	BD234	-45	V
		BD236	-60	
		BD238	-100	
V <sub>CEO</sub>	Collector-emitter voltage	BD234	-45	V
		BD236	-60	
		BD238	-80	
V <sub>EBO</sub>	Emitter -base voltage	Open collector	-5	V
I <sub>C</sub>	Collector current (DC)		-2	A
I <sub>CM</sub>	Collector current-Peak		-6	A
P <sub>C</sub>	Collector power dissipation	T <sub>C</sub> =25°C	25	W
T <sub>j</sub>	Junction temperature		150	°C
T <sub>stg</sub>	Storage temperature		-65~150	°C

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## CHARACTERISTICS

T<sub>j</sub>=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT	
V <sub>CEsat</sub>	Collector-emitter saturation voltage	I <sub>C</sub> =-1A; I <sub>B</sub> =-0.1A			-0.6	V	
V <sub>BE</sub>	Base-emitter on voltage	I <sub>C</sub> =-1A; V <sub>CE</sub> =-2V			-1.3	V	
V <sub>CEO(SUS)</sub>	Collector-emitter sustaining voltage	BD234	I <sub>C</sub> =-0.1A; I <sub>B</sub> =0	-45		V	
		BD236		-60			
		BD238		-80			
I <sub>CBO</sub>	Collector cut-off current	BD234	V <sub>CB</sub> =-45V; I <sub>E</sub> =0		-100	μA	
		BD236					V <sub>CB</sub> =-60V; I <sub>E</sub> =0
		BD238					V <sub>CB</sub> =-100V; I <sub>E</sub> =0
I <sub>EBO</sub>	Emitter cut-off current	V <sub>EB</sub> =-5V; I <sub>C</sub> =0			-1	mA	
h <sub>FE-1</sub>	DC current gain	I <sub>C</sub> =-150mA; V <sub>CE</sub> =-2V	40				
h <sub>FE-2</sub>	DC current gain	I <sub>C</sub> =-1A; V <sub>CE</sub> =-2V	25				
f <sub>T</sub>	Transition frequency	I <sub>C</sub> =-250mA; V <sub>CE</sub> =-10V	3			MHz	

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PACKAGE OUTLINE

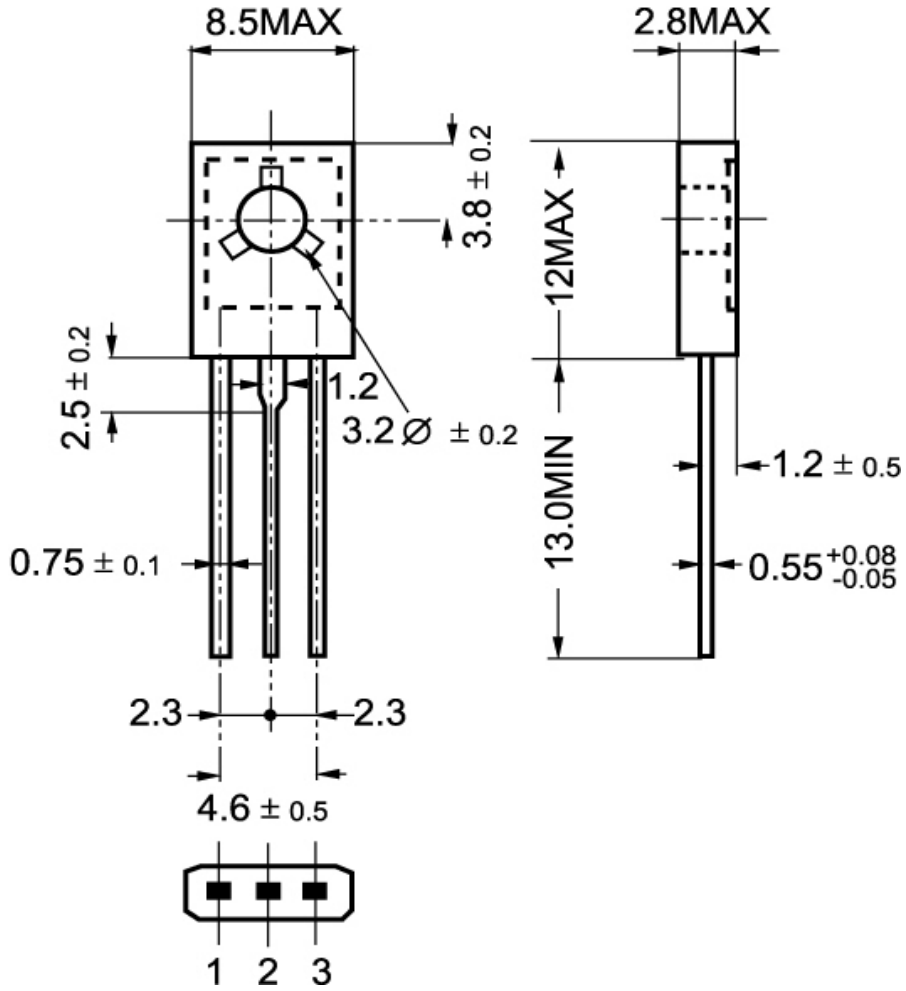


Fig.2 Outline dimensions