

Silicon NPN Power Transistors

BD175 BD177 BD179

DESCRIPTION

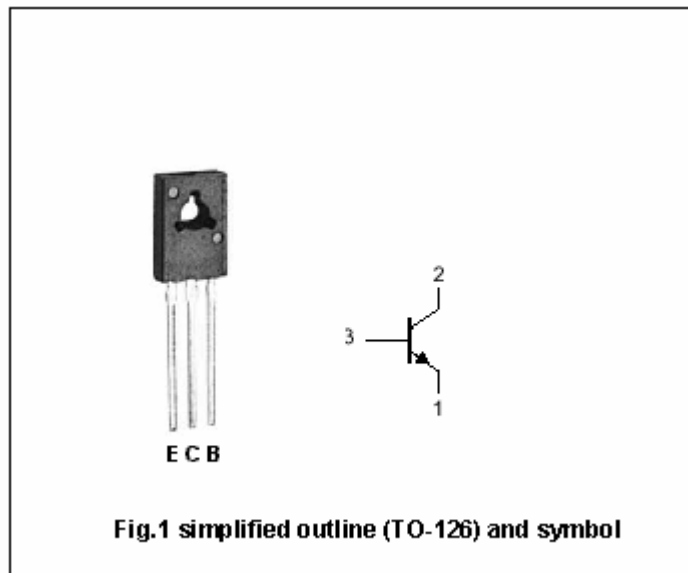
- With TO-126 package
- Complement to type BD176/178 /180

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℃)

SYMBOL	PARAMETER		CONDITIONS	VALUE	UNIT
V _{CBO}	Collector-base voltage	BD175	Open emitter	45	V
		BD177		60	
		BD179		80	
V _{CEO}	Collector-emitter voltage	BD175	Open base	45	V
		BD177		60	
		BD179		80	
V _{EBO}	Emitter -base voltage		Open collector	5	V
I _C	Collector current (DC)			3	A
I _{CM}	Collector current-Peak			7	A
P _C	Collector power dissipation		T _C =25℃	30	W
T _j	Junction temperature			150	℃
T _{stg}	Storage temperature			-65~150	℃

Silicon NPN Power Transistors**BD175 BD177 BD179****CHARACTERISTICS**T_j=25°C 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 _{BE}	Base-emitter on voltage		I _C =1A; V _{CE} =2V			1.3	V
V _{CEO(SUS)}	Collector-emitter sustaining voltage	BD175	I _C =0.1A; I _B =0	45			V
		BD177		60			
		BD179		80			
I _{CBO}	Collector cut-off current	BD175	V _{CB} =45V; I _E =0			100	μA
		BD177	V _{CB} =60V; I _E =0				
		BD179	V _{CB} =80V; I _E =0				
I _{EBO}	Emitter cut-off current		V _{EB} =5V; I _C =0			1	mA
h _{FE-1}	DC current gain		I _C =150mA; V _{CE} =2V	40		250	
h _{FE-2}	DC current gain		I _C =1A; V _{CE} =2V	15			
f _T	Transition frequency		I _C =250mA; V _{CE} =10V	3			MHz

◆ **h_{FE-1} Classifications**

6	10	16
40-100	63-160	100-250

□ classification 16 :only BD175

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PACKAGE OUTLINE

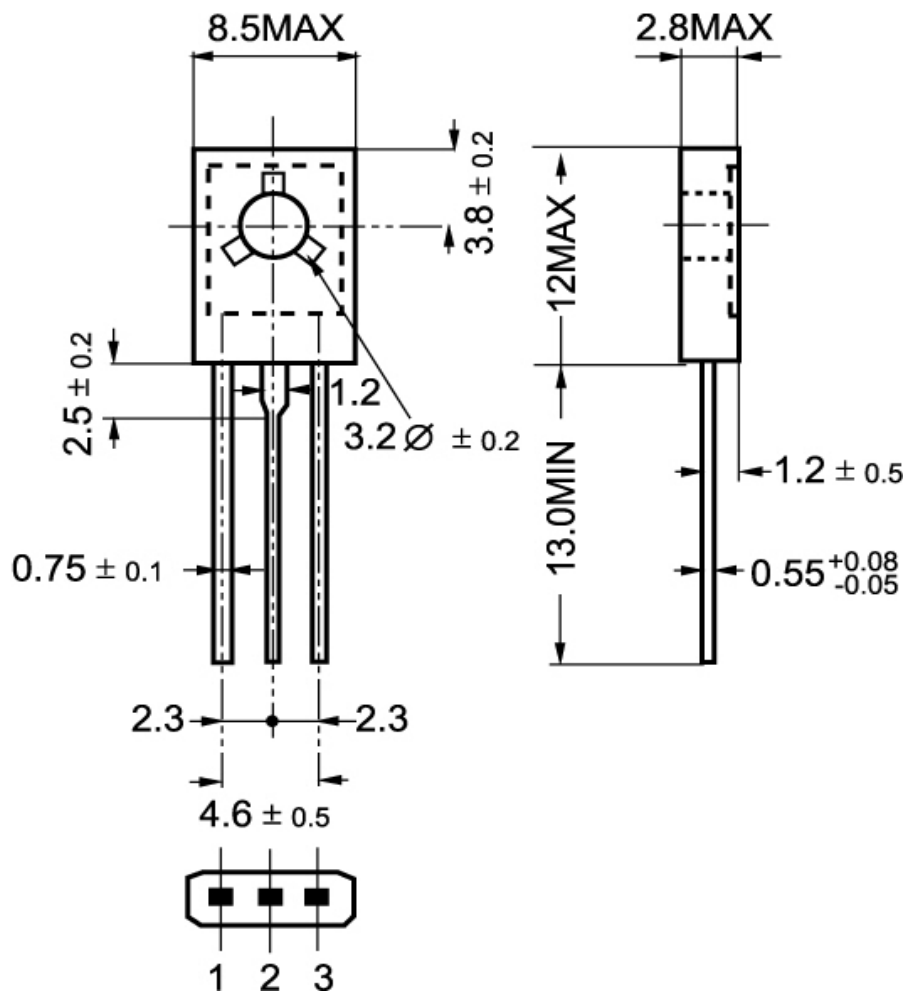


Fig.2 Outline dimensions