

Silicon PNP Darlington Power Transistors

BD676/BD678/BD680

DESCRIPTION

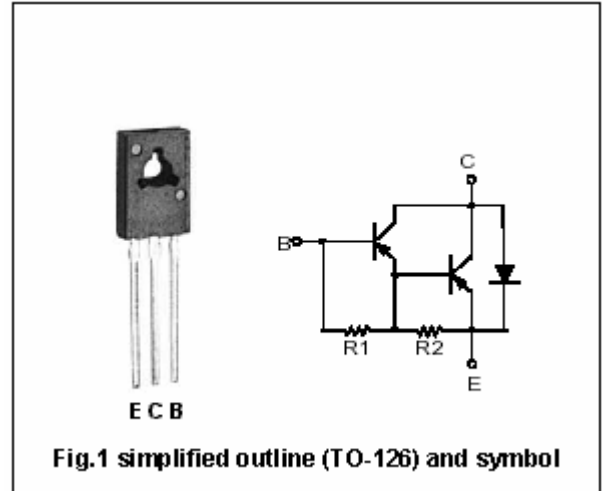
- With TO-126 package
- Complement to type BD675/BD677/BD679
- DARLINGTON
- High DC current gain

APPLICATIONS

- For use as output devices in complementary general-purpose amplifier 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 _{CB0}	Collector-base voltage	BD676	-45	V
		BD678	-60	
		BD680	-80	
V _{CEO}	Collector-emitter voltage	BD676	-45	V
		BD678	-60	
		BD680	-80	
V _{EBO}	Emitter -base voltage	Open collector	-5	V
I _C	Collector current		-4	A
I _B	Base current		-0.1	A
P _C	Collector power dissipation	T _C =25°C	40	W
T _j	Junction temperature		150	°C
T _{stg}	Storage temperature		-55~150	°C

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
R _{th j-c}	Thermal resistance junction to case	3.13	°C/W

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CHARACTERISTICS

T_j=25 °C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{(BR)CEO}	Collector-emitter breakdown voltage	BD676	-45			V
		BD678	-60			
		BD680	-80			
V _{(BR)CBO}	Collector-base breakdown voltage	BD676	-45			V
		BD678	-60			
		BD680	-80			
V _{(BR)EBO}	Emitter-base breakdown voltage	I _E =-5mA; I _C =0	-5			V
V _{CEsat}	Collector-emitter saturation voltage	I _C =-1.5A; I _B =-30mA			-2.5	V
V _{BE(on)}	Base-emitter on voltage	I _C =-1.5A; V _{CE} =-3V			-2.5	V
I _{CBO}	Collector cut-off current	V _{CB} =rated BV _{CEO} ; I _E =0 T _a =100 °C			-0.2 -2.0	mA
I _{CEO}	Collector cut-off current	V _{CE} =1/2rated BV _{CEO} ; I _B =0			-0.5	mA
I _{EBO}	Emitter cut-off current	V _{EB} =-5V; I _C =0			-2.0	mA
h _{FE}	DC current gain	I _C =-1.5A; V _{CE} =-3V	750			

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PACKAGE OUTLINE

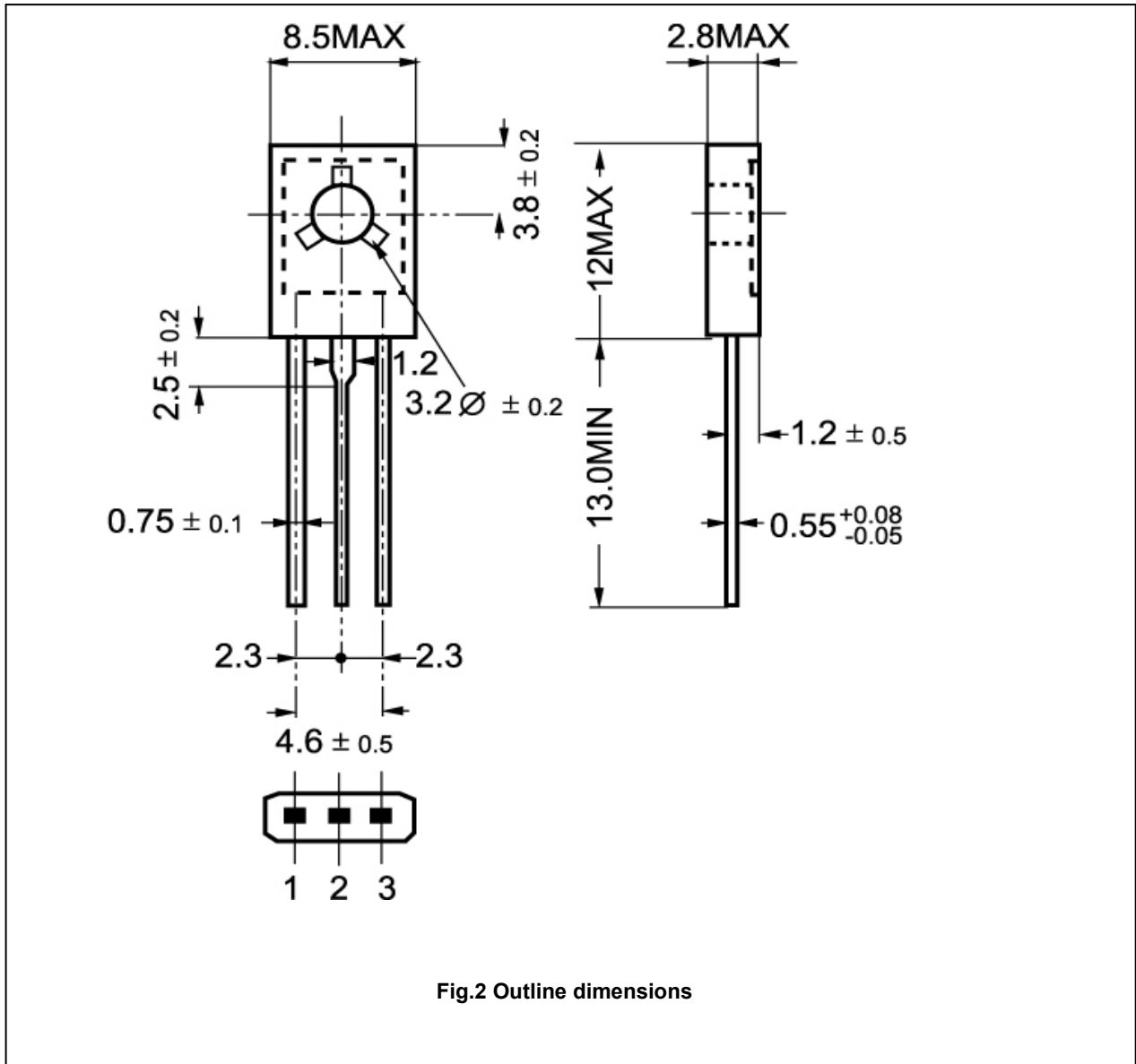


Fig.2 Outline dimensions