

Silicon PNP Power Transistors

BD676A/678A/680A/682

DESCRIPTION

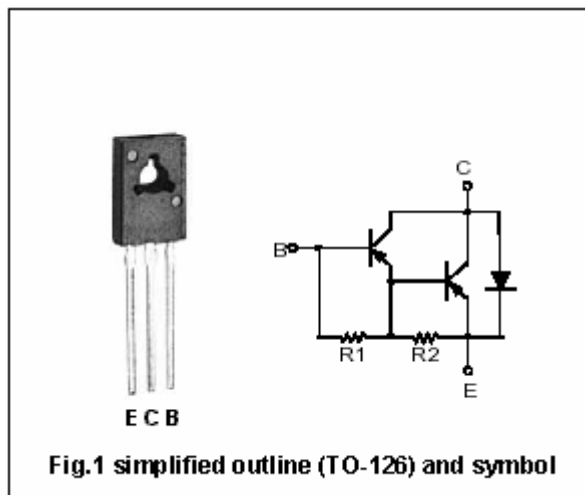
- With TO-126 package
- Complement to type BD675A/677A/679A/681
- DARLINGTON
- High DC current gain

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 <sub>CBO</sub>	Collector-base voltage	Open emitter	BD676A	-45	V
			BD678A	-60	
			BD680A	-80	
			BD682	-100	
V <sub>CEO</sub>	Collector-emitter voltage	Open base	BD676A	-45	V
			BD678A	-60	
			BD680A	-80	
			BD682	-100	
V <sub>EBO</sub>	Emitter -base voltage	Open collector	-5	V	
I <sub>C</sub>	Collector current		-4	A	
I <sub>CM</sub>	Collector current-Peak		-6	A	
I <sub>B</sub>	Base current		-0.1	A	
P <sub>C</sub>	Collector power dissipation	T <sub>C</sub> =25	40	W	
T <sub>j</sub>	Junction temperature		150		
T <sub>stg</sub>	Storage temperature		-65-150		

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## CHARACTERISTICS

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

SYMBOL	PARAMETER		CONDITIONS	MIN	TYP.	MAX	UNIT
V <sub>(BR)CEO</sub>	Collector-emitter breakdown voltage	BD676A	I <sub>C</sub> =-50mA; I <sub>B</sub> =0	-45			V
		BD678A		-60			
		BD680A		-80			
		BD682		-100			
V <sub>CEsat</sub>	Collector-emitter saturation voltage	BD676A/678A/680A	I <sub>C</sub> =-2A; I <sub>B</sub> =-40mA			-2.8	V
		BD682	I <sub>C</sub> =-1.5A; I <sub>B</sub> =-30mA			-2.5	
V <sub>BE(on)</sub>	Emitter-base voltage	BD676A/678A/680A	I <sub>C</sub> =-2A; V <sub>CE</sub> =-3V			-2.5	V
		BD682	I <sub>C</sub> =-1.5A; V <sub>CE</sub> =-3V				
I <sub>CBO</sub>	Collector cut-off current		V <sub>CB</sub> =rated BV <sub>CEO</sub> ; I <sub>E</sub> =0 T <sub>a</sub> =100			-0.2 -2.0	mA
I <sub>CEO</sub>	Collector cut-off current		V <sub>CE</sub> =1/2rated BV <sub>CEO</sub> ; I <sub>B</sub> =0			-0.5	mA
I <sub>EBO</sub>	Emitter cut-off current		V <sub>EB</sub> =-5V; I <sub>C</sub> =0			-2.0	mA
h <sub>FE</sub>	DC current gain	BD676A/678A/680A	I <sub>C</sub> =-2A; V <sub>CE</sub> =-3V	750			
		BD682	I <sub>C</sub> =-1.5A; V <sub>CE</sub> =-3V	750			

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PACKAGE OUTLINE

