

Silicon NPN Power Transistors

BD895A/897A/899A

DESCRIPTION

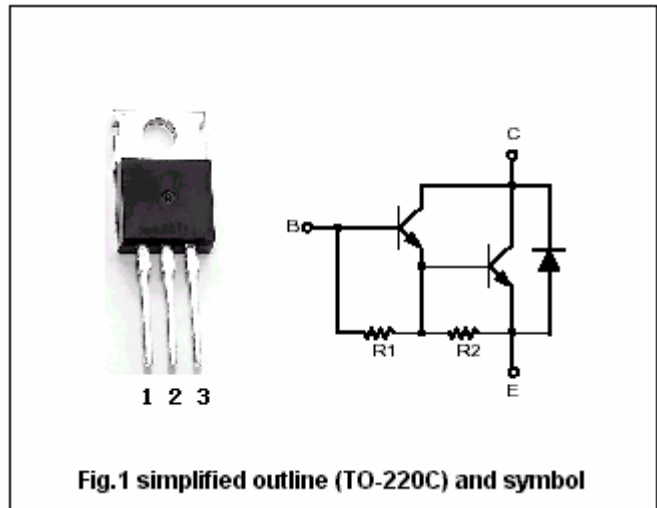
- With TO-220C package
- Complement to type BD896A/898A/900A
- DARLINGTON

APPLICATIONS

- For use in output stages in audio equipment ,general amplifier,and analogue switching applications

PINNING

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

Absolute maximum ratings($T_a=25^\circ$)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	BD895A	45	V
		BD897A	60	
		BD899A	80	
V_{CEO}	Collector-emitter voltage	BD895A	45	V
		BD897A	60	
		BD899A	80	
V_{EBO}	Emitter-base voltage	Open collector	5	V
I_C	Collector current-DC		8	A
I_B	Base current		300	mA
P_T	Total power dissipation	$T_c=25^\circ$	70	W
		$T_a=25^\circ$	2	
T_j	Junction temperature		150	$^\circ$
T_{stg}	Storage temperature		-65~150	$^\circ$

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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	BD895A	45			V	
		BD897A	60				
		BD899A	80				
V _{CEsat}	Collector-emitter saturation voltage	I _C =4A, I _B =16mA			2.8	V	
V _{BE}	Base-emitter on voltage	I _C =4A ; V _{CE} =3V			2.5	V	
I _{CBO}	Collector cut-off current	BD895A	V _{CB} =45V, I _E =0 T _C =100 °C			0.2 2.0	mA
		BD897A	V _{CB} =60V, I _E =0 T _C =100 °C			0.2 2.0	
		BD899A	V _{CB} =80V, I _E =0 T _C =100 °C			0.2 2.0	
I _{CEO}	Collector cut-off current	BD895A	V _{CE} =30V, I _B =0			0.5	mA
		BD897A	V _{CE} =30V, I _B =0				
		BD899A	V _{CE} =40V, I _B =0				
I _{EBO}	Emitter cut-off current	V _{EB} =5V; I _C =0			2	mA	
h _{FE}	DC current gain	I _C =4A ; V _{CE} =3V	750				
V _{EC}	Diode forward voltage	I _E =8A			3.5	V	
t _{on}	Turn-on time	I _C =3A ; I _{B1} =-I _{B2} =12mA V _{BE} =-3.5V; R _L =10Ω; t _p =20μs		1		μs	
t _{off}	Turn-off time			5		μs	

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
R _{th j-c}	Thermal resistance junction to case	1.79	°C/W

