

Silicon NPN Power Transistors

BD895/897/899/901

DESCRIPTION

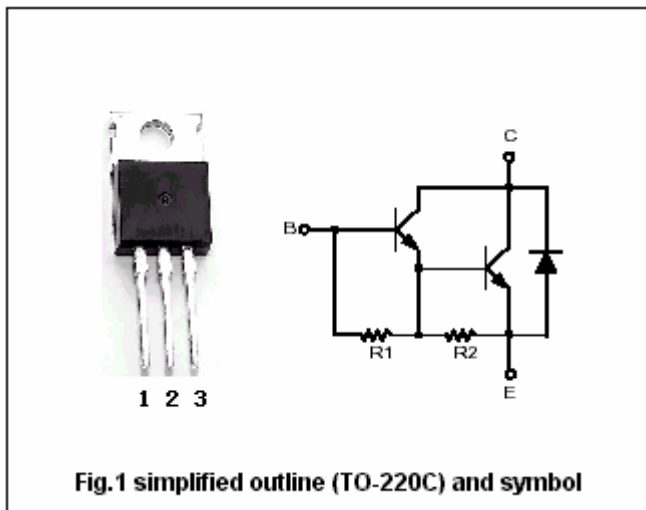
- With TO-220C package
- Complement to type BD896/898/900/902
- DARLINGTON

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(Ta=25)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT	
V _{CBO}	Collector-base voltage	Open emitter	BD895	45	V
			BD897	60	
			BD899	80	
			BD901	100	
V _{CEO}	Collector-emitter voltage	Open base	BD895	45	V
			BD897	60	
			BD899	80	
			BD901	100	
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	70	W	
		T _a =25	2		
T _j	Junction temperature		150		
T _{stg}	Storage temperature		-65~150		

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CHARACTERISTICS

T_j=25 unless otherwise specified

SYMBOL	PARAMETER		CONDITIONS	MIN	TYP.	MAX	UNIT
V _{(BR)CEO}	Collector-emitter breakdown voltage	BD895	I _C =100mA, I _B =0	45			V
		BD897		60			
		BD899		80			
		BD901		100			
V _{CEsat}	Collector-emitter saturation voltage		I _C =3A, I _B =12mA			2.5	V
V _{BE}	Base-emitter on voltage		I _C =3A; V _{CE} =3V			2.5	V
I _{CBO}	Collector cut-off current	BD895	V _{CB} =45V, I _E =0 T _C =100			0.2 2.0	mA
		BD897	V _{CB} =60V, I _E =0 T _C =100			0.2 2.0	
		BD899	V _{CB} =80V, I _E =0 T _C =100			0.2 2.0	
		BD901	V _{CB} =100V, I _E =0 T _C =100			0.2 2.0	
I _{CEO}	Collector cut-off current	BD895	V _{CE} =30V, I _B =0			0.5	mA
		BD897	V _{CE} =30V, I _B =0				
		BD899	V _{CE} =40V, I _B =0				
		BD901	V _{CE} =50V, I _B =0				
I _{EBO}	Emitter cut-off current		V _{EB} =5V; I _C =0			2	mA
h _{FE}	DC current gain		I _C =3A; 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	/W

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PACKAGE OUTLINE

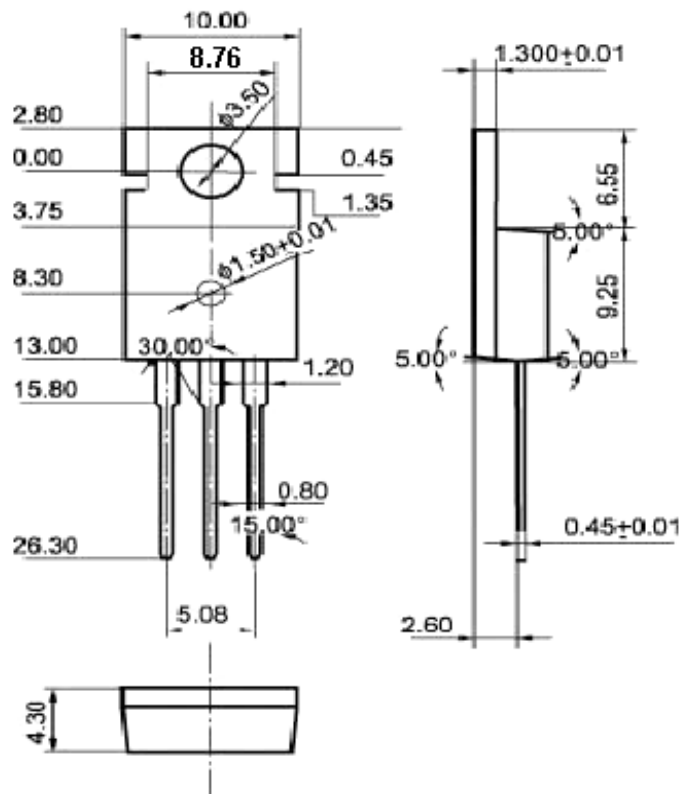


Fig.2 Outline dimensions