Silicon PNP Power Transistors BD896/898/900/902

DESCRIPTION

·With TO-220C package
·Complement to type BD895/897/899/901
·DARLINGTON

APPLICATIONS

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

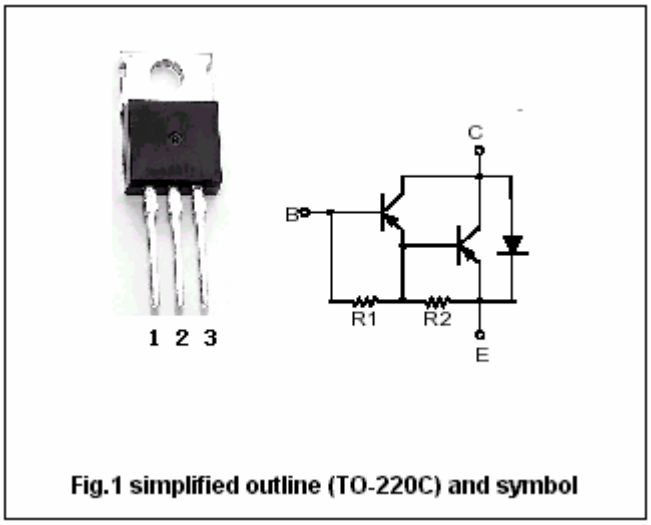

Fig.1 simplified outline (TO-220C) and symbol

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	BD896	Open emitter	-45	V
		BD898		-60	
		BD900		-80	
		BD902		-100	
V_{CEO}	Collector-emitter voltage	BD896	Open base	-45	V
		BD898		-60	
		BD900		-80	
		BD902		-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	□

CHARACTERISTICS

Tj=25□ unless otherwise specified

SYMBOL	PARAMETER		CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)CEO}$	Collector-emitter breakdown voltage	BD896	I_C=-100mA, I_B=0	-45			V
		BD898		-60			
		BD900		-80			
		BD902		-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	BD896	V_{CB}=-45V, I_E=0			-0.2 -2.0	mA
			T_C=100□				
		BD898	V_{CB}=-60V, I_E=0			-0.2 -2.0	
			T_C=100□				
		BD900	V_{CB}=-80V, I_E=0			-0.2 -2.0	
			T_C=100□				
		BD902	V_{CB}=-100V, I_E=0			-0.2 -2.0	
			T_C=100□				
I_{CEO}	Collector cut-off current	BD896	V_{CE}=-30V, I_B=0			-0.5	mA
		BD898	V_{CE}=-30V, I_B=0				
		BD900	V_{CE}=-40V, I_B=0				
		BD902	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
ton	Turn-on time		I_C=-3A ; I_{B1}=-I_{B2}=-12mA V_{BE}=3.5V;R_L=10Ω;t_p=20μs		1		μs
toff	Turn-off time				5		μs

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j\text{-}c}$	Thermal resistance junction to case	1.79	□/W

PACKAGE OUTLINE

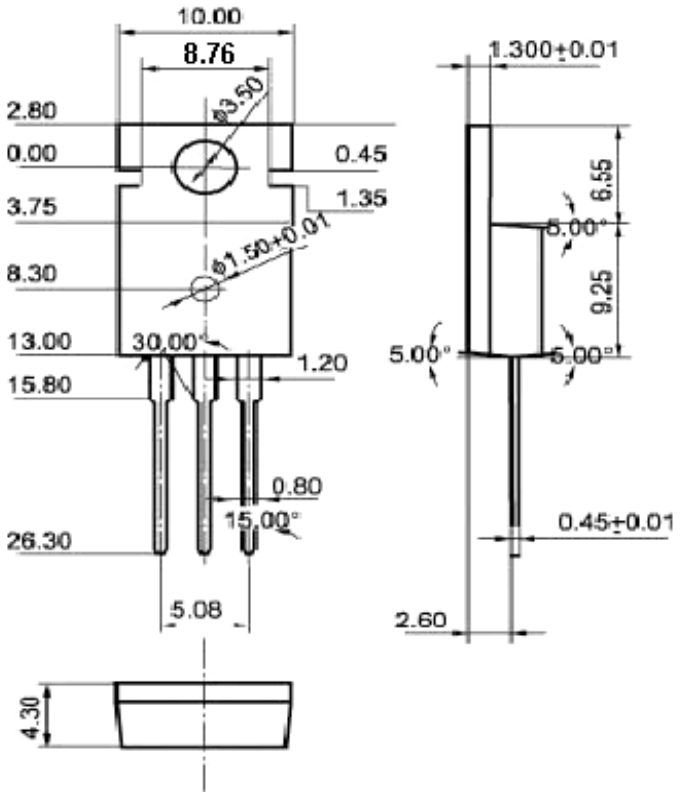

Fig.2 Outline dimensions