

Silicon PNP Power Transistors

BDT92

DESCRIPTION

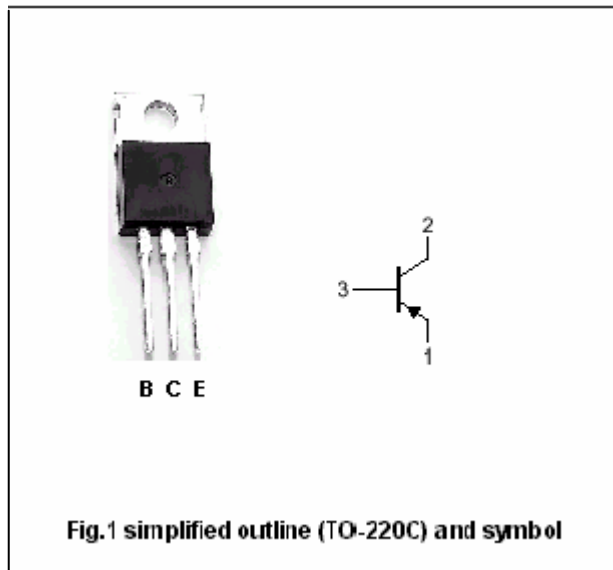
- With TO-220C package
- Complement to type BDT91

APPLICATIONS

- For use in general purpose power amplifier and switching applications

PINNING

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

Absolute maximum ratings ($T_a=25^\circ\text{C}$)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	Open emitter	-60	V
V_{CEO}	Collector-emitter voltage	Open base	-60	V
V_{EBO}	Emitter-base voltage	Open collector	-5	V
I_C	Collector current		-10	A
I_B	Base current		-6	A
P_C	Collector power dissipation	$T_C \leq 25^\circ\text{C}$	90	W
T_j	Junction temperature		150	$^\circ\text{C}$
T_{stg}	Storage temperature		-55~150	$^\circ\text{C}$

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j-c}$	Thermal resistance junction to case	1.39	$^\circ\text{C}/\text{W}$

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CHARACTERISTICS

T_j=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{CE0(SUS)}	Collector-emitter sustaining voltage	I _C =-100mA; I _B =0	-60			V
V _{CEsat-1}	Collector-emitter saturation voltage	I _C =-3 A; I _B =-0.3 A			-1.1	V
V _{CEsat-2}	Collector-emitter saturation voltage	I _C =-10 A; I _B =-3.3 A			-3.0	V
V _{BE}	Base-emitter voltage	I _C =-4A ; V _{CE} =-4V			-1.6	V
I _{CBO}	Collector cut-off current	V _{CB} =-60V; I _E =0			-0.1	mA
I _{CEO}	Collector cut-off current	V _{CE} =-30V; I _B =0			-1.0	mA
I _{EBO}	Emitter cut-off current	V _{EB} =-5V; I _C =0			-1.0	mA
h _{FE-1}	DC current gain	I _C =-4A ; V _{CE} =-4V	20		200	
h _{FE-2}	DC current gain	I _C =-10A ; V _{CE} =-4V	5			
f _T	Transition frequency	I _C =-0.5A ; V _{CE} =-10V	4			MHz

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PACKAGE OUTLINE

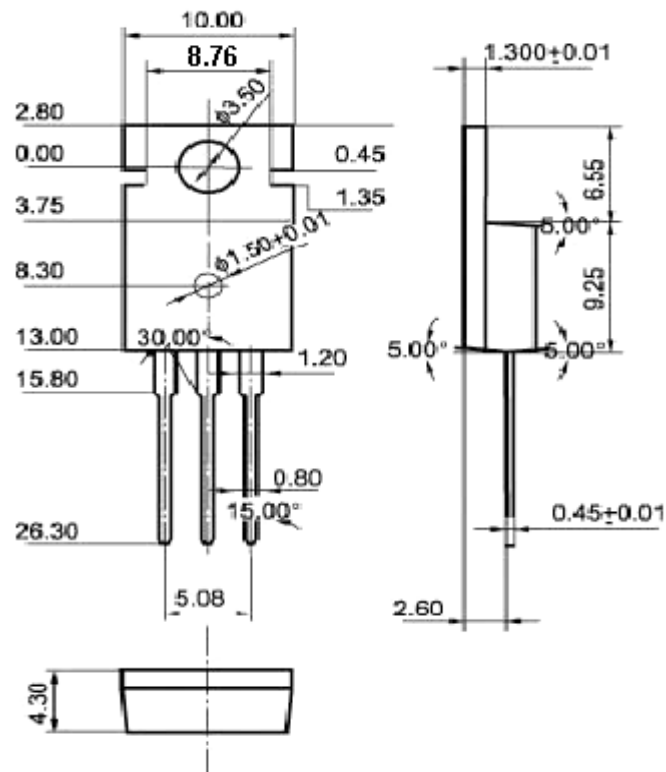


Fig.2 Outline dimensions (unindicated tolerance: ± 0.10 mm)