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

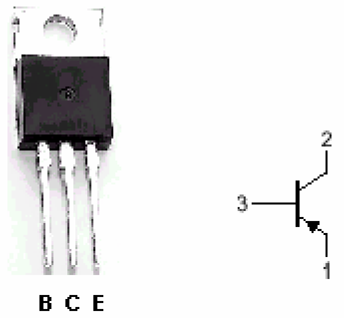

Fig.1 simplified outline (TO-220C) and symbol

Absolute maximum ratings (Ta=25□)

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≤25□	90	W
T_j	Junction temperature		150	□
T_{stg}	Storage temperature		-55~150	□

THERMAL CHARACTERISTICS

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

CHARACTERISTICS

Tj=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{CEO(SUS)}$	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

PACKAGE OUTLINE

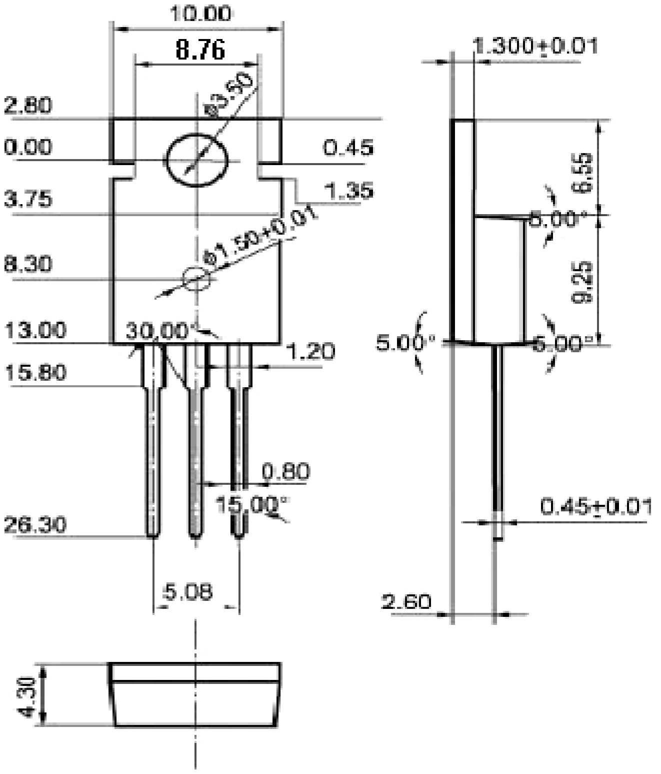

Fig.2 Outline dimensions (unindicated tolerance:±0.10 mm)