

Silicon PNP Power Transistors

BD810

DESCRIPTION

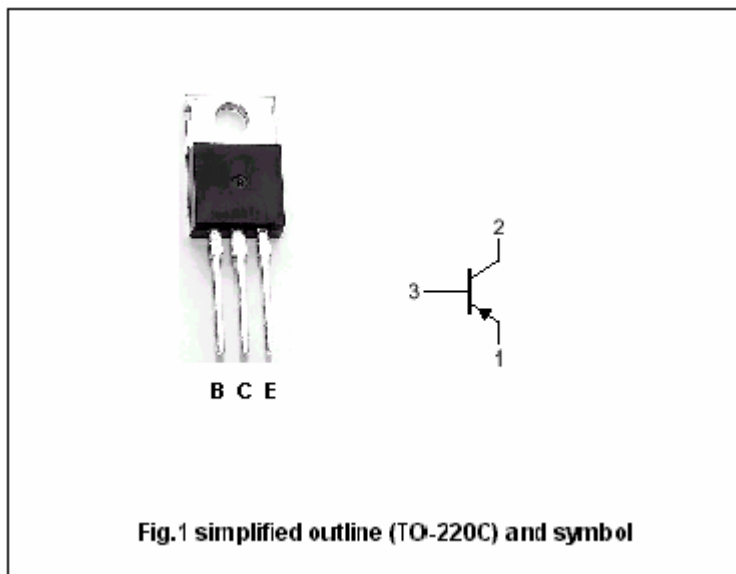
- With TO-220C package
- Complement to type BD809
- DC current gain
: $h_{FE} = 30$ (Min) @ $I_C = 2.0$ Adc

APPLICATIONS

- Designed for use in high power audio amplifiers utilizing complementary or quasi complementary circuits.

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	-80	V
V_{CEO}	Collector-emitter voltage	Open base	-80	V
V_{EBO}	Emitter-base voltage	Open collector	-5	V
I_C	Collector current		-10	A
I_B	Base current		-6	A
P_D	Total power dissipation	$T_C=25^\circ\text{C}$	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 _{CEQ(SUS)}	Collector-emitter sustaining voltage	I _C =-0.1A; I _B =0	-80			V
V _{CEsat}	Collector-emitter saturation voltage	I _C =-3 A; I _B =-0.3 A			-1.1	V
V _{BE}	Base-emitter voltage	I _C =-4A ; V _{CE} =-2V			-1.6	V
I _{CBO}	Collector cut-off current	V _{CB} =-80V; I _E =0			-1.0	mA
I _{EBO}	Emitter cut-off current	V _{EB} =-5V; I _C =0			-2.0	mA
h _{FE-1}	DC current gain	I _C =-2A ; V _{CE} =-2V	30			
h _{FE-2}	DC current gain	I _C =-4A ; V _{CE} =-2V	15			
f _T	Transition frequency	I _C =-1A ; V _{CE} =-10V; f=1.0MHz	1.5			MHz

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PACKAGE OUTLINE

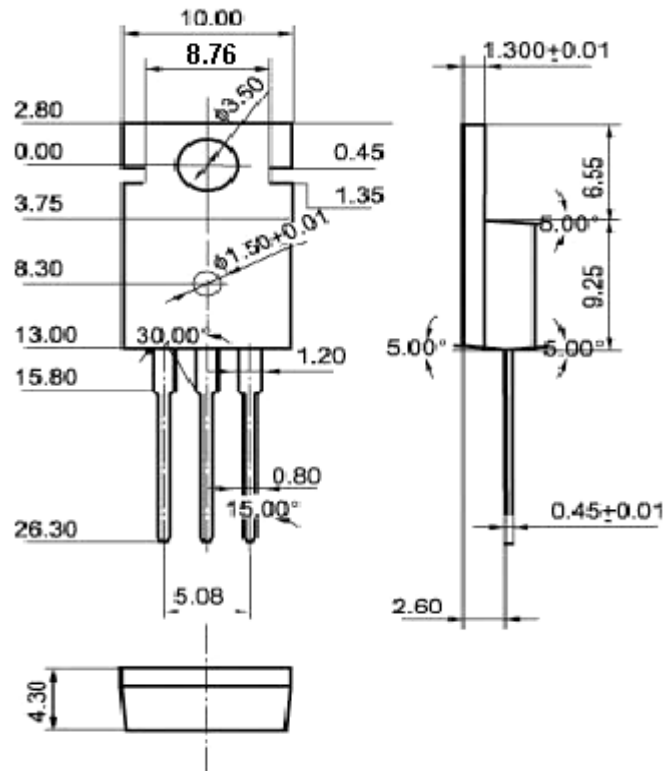


Fig.2 Outline dimensions (unindicated tolerance:±0.10 mm)