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.

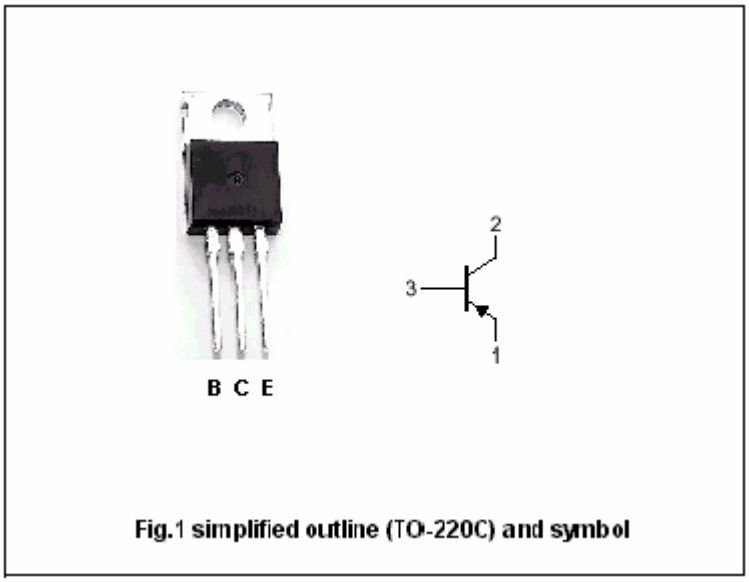

Fig.1 simplified outline (TO-220C) and symbol

PINNING

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

Absolute maximum ratings (Ta=25℃)

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℃	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

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CHARACTERISTICS

Tj=25℃ unless otherwise specified

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

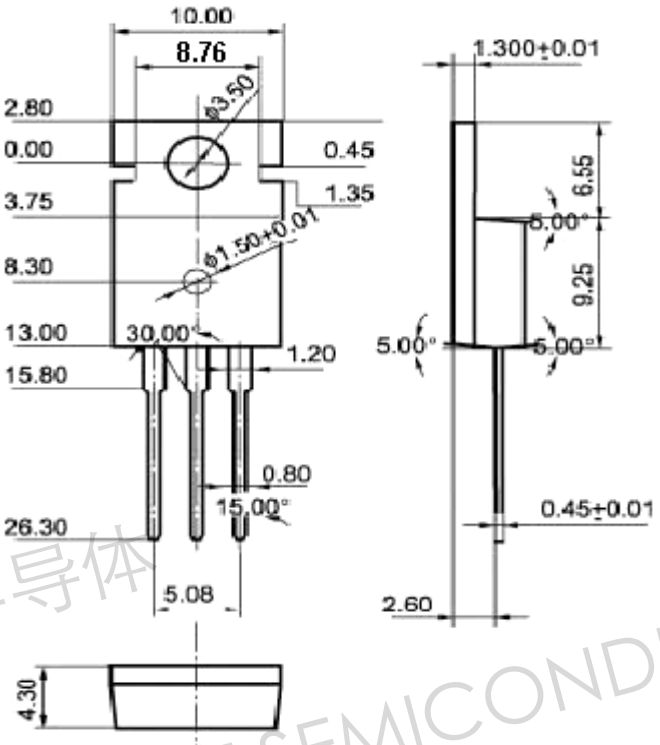

Fig.2 Outline dimensions (unindicated tolerance:±0.10 mm)