

BD810

Silicon PNP Transistors



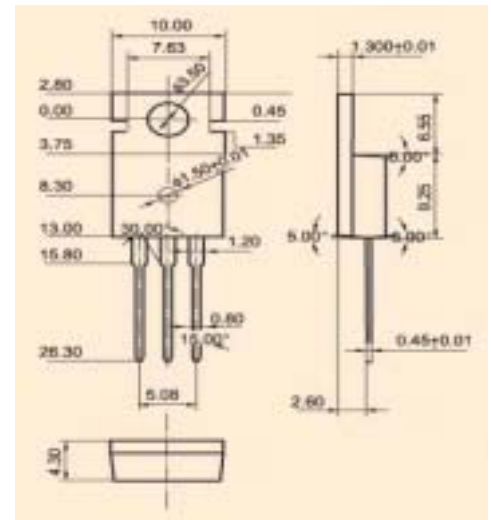
B C E

◆ Features

- Designed for use in high power audio amplifiers utilizing complementary or quasi complementary circuits.
- With TO-220 package

◆ Absolute Maximum Ratings $T_c=25^{\circ}\text{C}$

SYMBOL	PARAMETER	RATING	UNIT
V_{CBO}	Collector to base voltage	80	V
V_{CEO}	Collector to emitter voltage	80	V
V_{EBO}	Emitter to base voltage	5.0	V
I_B	Base collector current	6.0	A
I_C	Collector current	10	A
P_C	Collector power dissipation	90	W
T_j	Junction temperature	150	$^{\circ}\text{C}$
T_{stg}	Storage temperature	-55~150	$^{\circ}\text{C}$



TO-220

◆ Electrical Characteristics $T_c=25^{\circ}\text{C}$

SYMBOL	PARAMETER	CONDITIONS	MIN	TYPE	MAX	UNIT
I_{CBO}	Collector-base cut-off current	$V_{CB}=80\text{V}; I_E=0$			1.0	mA
I_{EBO}	Emitter-base cut-off current	$V_{EB}=5.0\text{V}; I_C=0$			2.0	mA
I_{CEO}	Collector-emitter cut-off current					
V_{CBO}	Collector-base breakdown voltage					
$V_{(BR)ceo}$	Collector-emitter breakdown voltage	$I_C=0.1\text{A}; I_B=0$	80			V
V_{EBO}	Emitter-base breakdown voltage					
$V_{CE(sat-1)}$	Collector-emitter saturation voltages	$I_C=3\text{A}; I_B=0.3\text{A}$			1.1	V
$V_{CE(sat-2)}$	Collector-emitter saturation voltages					
h_{FE-1}	Forward current transfer ratio	$I_C=2\text{A}; V_{CE}=2\text{V}$	30			
h_{FE-2}	Forward current transfer ratio	$I_C=4\text{A}; V_{CE}=2\text{V}$	15			
h_{FE-3}	Forward current transfer ratio					
$V_{BE(on)1}$	Base-emitter on voltages	$I_C=4\text{A}; V_{CE}=2\text{V}$			1.6	V
$V_{BE(on)2}$	Base-emitter on voltages					
f_T	Transition frequency	$V_{CE}=10\text{V}; I_C=1\text{A}; f=1\text{MHz}$	1.5			MHz
C_{ob}	Output Capacitance					