



APPLICATIONS

Audio Power Amplifier Application.

ABSOLUTE MAXIMUM RATINGS ($T_a=25^{\circ}\text{C}$)

T_{stg} —Storage Temperature..... $-55\sim 150^{\circ}\text{C}$

T_j —Junction Temperature..... 150°C

P_C —Collector Dissipation..... 600mW

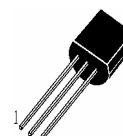
V_{CBO} —Collector-Base Voltage..... 35V

V_{CEO} —Collector-Emitter Voltage..... 30V

V_{EBO} —Emitter-Base Voltage..... 5V

I_C —Collector Current..... 800mA

TO-92



1—Emitter, E

2—Collector, C

3—Base, B

ELECTRICAL CHARACTERISTICS ($T_a=25^{\circ}\text{C}$)

Symbol	Characteristics	Min	Typ	Max	Unit	Test Conditions
BVCBO	Collector-Base Breakdown Voltage	35			V	$I_C=0.1\text{mA}$, $I_E=0$
BVCEO	Collector-Emitter Breakdown Voltage	30			V	$I_C=10\text{mA}$, $I_B=0$
BVEBO	Emitter-Base Breakdown Voltage	5			V	$I_E=0.1\text{mA}$, $I_C=0$
HFE (1)	DC Current Gain	100		320		$V_{\text{CE}}=1\text{V}$, $I_C=100\text{mA}$
HFE (2)	DC Current Gain	35				$V_{\text{CE}}=1\text{V}$, $I_C=700\text{mA}$
$V_{\text{CE(sat)}}$	Collector- Emitter Saturation Voltage			0.5	V	$I_C=500\text{mA}$, $I_B=20\text{mA}$
V_{BE}	Base-Emitter Voltage	0.5		0.8	V	$V_{\text{CE}}=1\text{V}$, $I_C=10\text{mA}$
I_{CBO}	Collector Cut-off Current			100	nA	$V_{\text{CB}}=35\text{V}$, $I_E=0$
I_{EBO}	Emitter Cut-off Current			100	nA	$V_{\text{EB}}=5\text{V}$, $I_C=0$
f_T	Current Gain-Bandwidth Product		120		MHz	$V_{\text{CE}}=5\text{V}$, $I_C=10\text{mA}$
Cob	Output Capacitance		13		pF	$V_{\text{CB}}=10\text{V}$, $I_E=0$, $f=1\text{MHz}$

hFE Classification

O

Y

100—200

160—320

