



HBC556

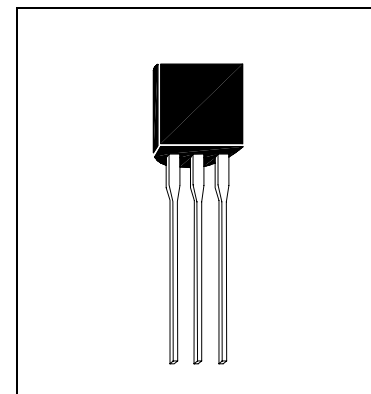
PNP EPITAXIAL PLANAR TRANSISTOR

Description

The HBC556 is primarily intended for use in driver stage of audio amplifiers.

Features

- High Breakdown Voltage: 65V at $I_C=1\text{mA}$
- High AC Current Gain: 75-500 at $I_C=2\text{mA}, V_{CE}=5\text{V}, f=1\text{MHz}$



Absolute Maximum Ratings

- Maximum Temperatures
Storage Temperature -55 ~ +150 °C
Junction Temperature +150 °C Maximum
- Maximum Power Dissipation
Total Power Dissipation ($T_a=25^\circ\text{C}$) 500 mW
- Maximum Voltages and Currents ($T_a=25^\circ\text{C}$)
VCBO Collector to Base Voltage -80 V
VCEO Collector to Emitter Voltage -65 V
VEBO Emitter to Base Voltage -5 V
 I_C Collector Current -100 mA

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

Symbol	Min.	Typ.	Max.	Unit	Test Conditions
BVCBO	-80	-	-	V	$I_C=-100\mu\text{A}, I_E=0$
BVCEO	-65	-	-	V	$I_C=-1\text{mA}, I_B=0$
BVEBO	-5	-	-	V	$I_E=-10\mu\text{A}, I_C=0$
ICBO	-	-	-15	nA	$V_{CB}=-30\text{V}, I_E=0$
VBE(on)1	-600	-	-750	mV	$I_C=-2\text{mA}, V_{CE}=-5\text{V}$
VBE(on)2	-	-	-820	mV	$I_C=-10\text{mA}, V_{CE}=-5\text{V}$
*VCE(sat)1	-	-	-300	mV	$I_C=-10\text{mA}, I_B=-0.5\text{mA}$
*VCE(sat)2	-	-	-650	mV	$I_C=-100\text{mA}, I_B=-5\text{mA}$
*hFE	75	-	475		$V_{CE}=-5\text{V}, I_C=-2\text{mA}$
fT	-	300	-	MHZ	$V_{CE}=-5\text{V}, I_C=-10\text{mA}, f=100\text{MHz}$
Cob	-	4.5	-	Pf	$V_{CB}=-10\text{V}, I_E=0, f=1\text{MHz}$

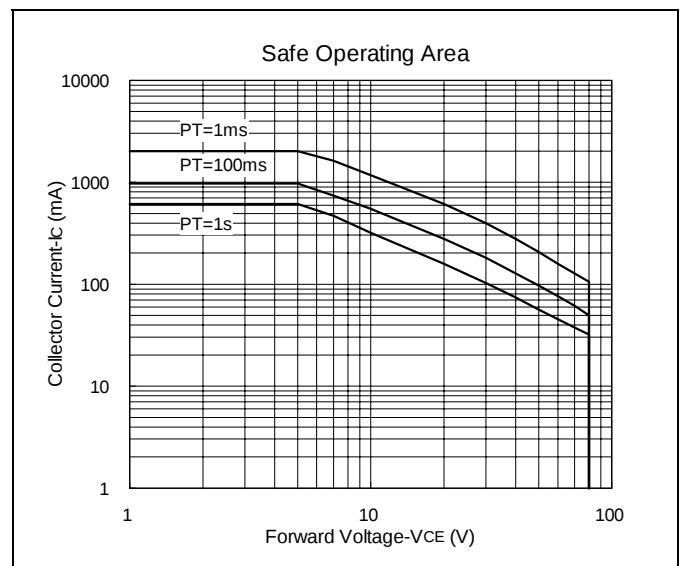
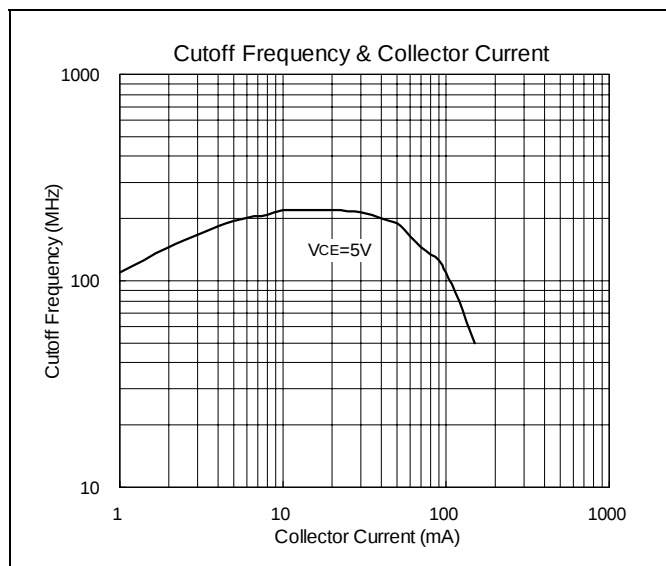
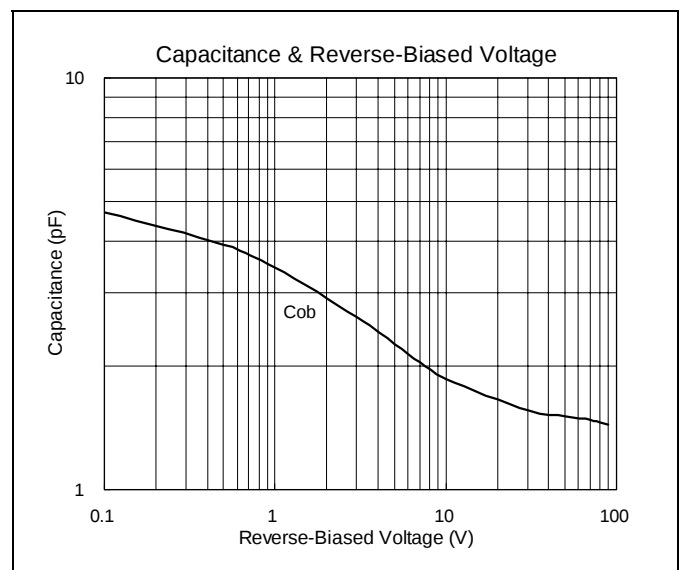
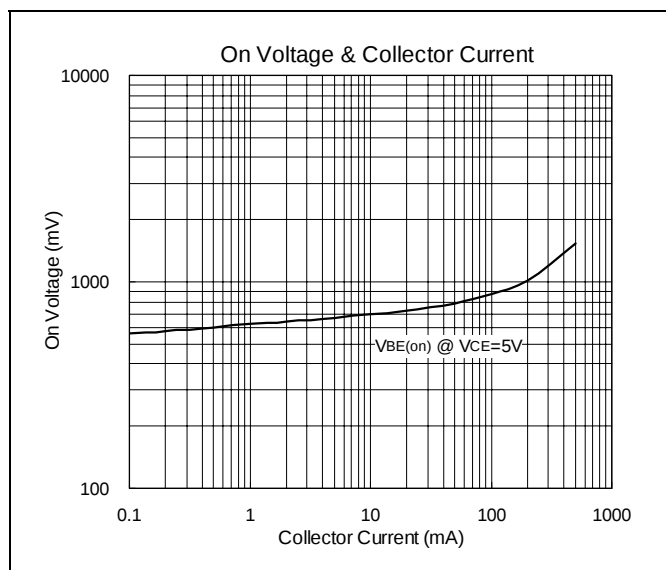
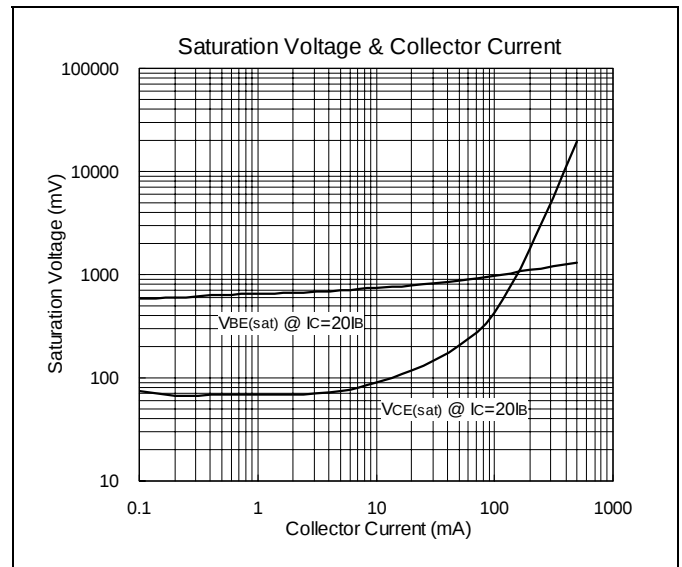
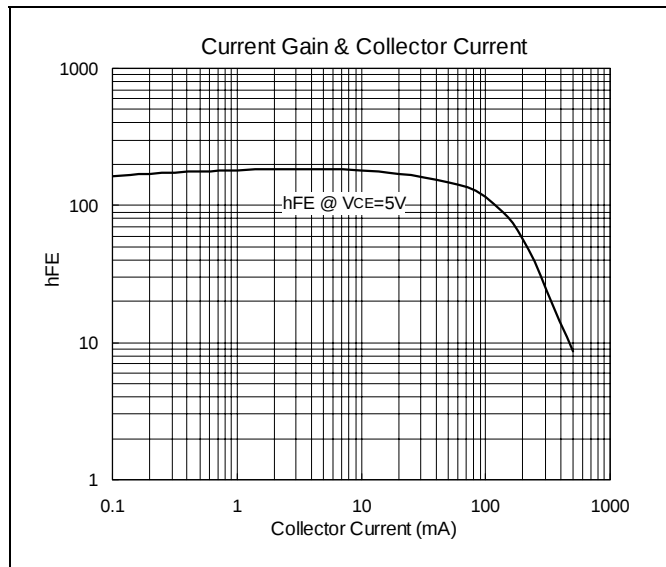
*Pulse Test : Pulse Width $\leq 380\mu\text{s}$, Duty Cycle $\leq 2\%$

Classification of hFE

Rank	A	B	Normal
Range	125-250	220-475	75-475

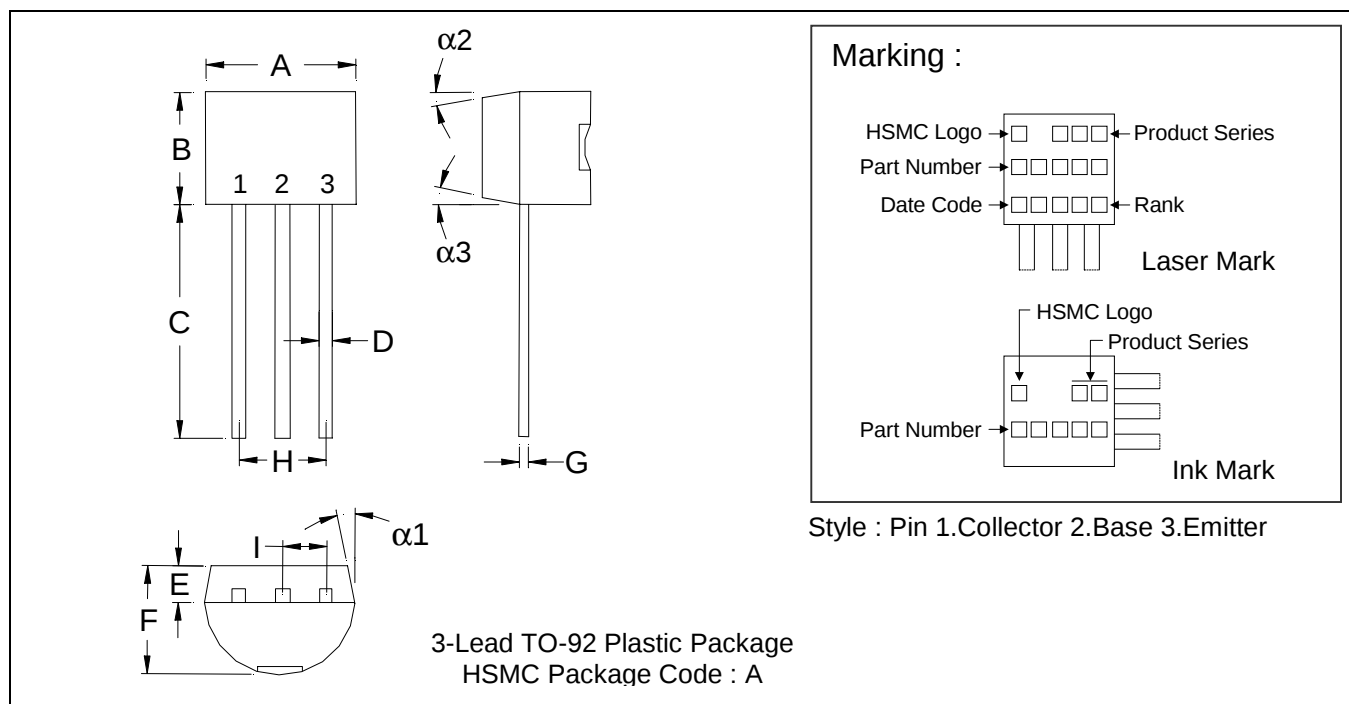


Characteristics Curve





TO-92 Dimension



*:Typical

DIM	Inches		Millimeters		DIM	Inches		Millimeters	
	Min.	Max.	Min.	Max.		Min.	Max.	Min.	Max.
A	0.1704	0.1902	4.33	4.83	G	0.0142	0.0220	0.36	0.56
B	0.1704	0.1902	4.33	4.83	H	-	*0.1000	-	*2.54
C	0.5000	-	12.70	-	I	-	*0.0500	-	*1.27
D	0.0142	0.0220	0.36	0.56	$\alpha 1$	-	*5°	-	*5°
E	-	*0.0500	-	*1.27	$\alpha 2$	-	*2°	-	*2°
F	0.1323	0.1480	3.36	3.76	$\alpha 3$	-	*2°	-	*2°

Notes : 1.Dimension and tolerance based on our Spec. dated Apr. 25,1996.
2.Controlling dimension : millimeters.
3.Maximum lead thickness includes lead finish thickness, and minimum lead thickness is the minimum thickness of base material.
4.If there is any question with packing specification or packing method, please contact your local HSMC sales office.

Material :

- Lead : 42 Alloy ; solder plating
- Mold Compound : Epoxy resin family, flammability solid burning class:UL94V-0

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