



HE8551

PNP EPITAXIAL PLANAR TRANSISTOR

Description

The HE8551 is designed for use in 2W output amplifier of portable radios in class B push-pull operation.

Features

- High Total Power Dissipation (PT: 2W, TC=25°C)
- High Collector Current (IC: 1.5A)
- Complementary to HE8051



Absolute Maximum Ratings

- Maximum Temperatures
 Storage Temperature -55 ~ +150 °C
 Junction Temperature +150 °C Maximum
- Maximum Power Dissipation
 Total Power Dissipation (Ta=25°C) 1 W
 Total Power Dissipation (Tc=25°C) 2 W
- Maximum Voltages and Currents (Ta=25°C)
 VCBO Collector to Base Voltage -40 V
 VCEO Collector to Emitter Voltage -25 V
 VEBO Emitter to Base Voltage -6 V
 IC Collector Current -1.5 A
 IB Base Current -0.5 A

Characteristics (Ta=25°C)

Symbol	Min.	Typ.	Max.	Unit	Test Conditions
BVCBO	-40	-	-	V	IC=-100uA, IE=0
BVCEO	-25	-	-	V	IC=-2mA, IB=0
BVEBO	-6	-	-	V	IE=-100uA, IC=0
ICBO	-	-	-100	nA	VCB=-35V, IE=0
IEBO	-	-	-100	nA	VEB=-6V, IC=0
*VCE(sat)	-	-	-0.5	V	IC=-0.8A, IB=-80mA
*VBE(sat)	-	-	-1.2	V	IC=-0.8A, IB=-80mA
VBE(on)	-	-	-1	V	VCE=-1V, IC=-10mA
*hFE1	45	-	-		VCE=-1V, IC=-5mA
*hFE2	85	-	500		VCE=-1V, IC=-100mA
*hFE3	40	-	-		VCE=-1V, IC=-800mA
fT	100	-	-	MHz	VCE=-10V, IC=-50mA, f=100MHz

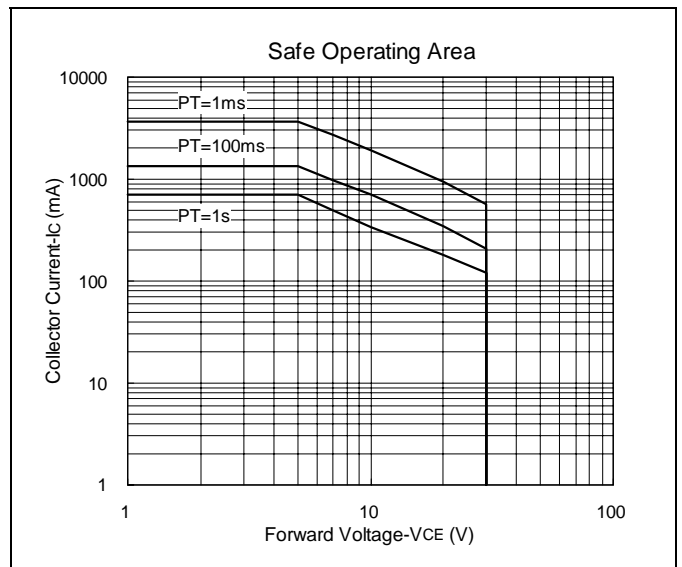
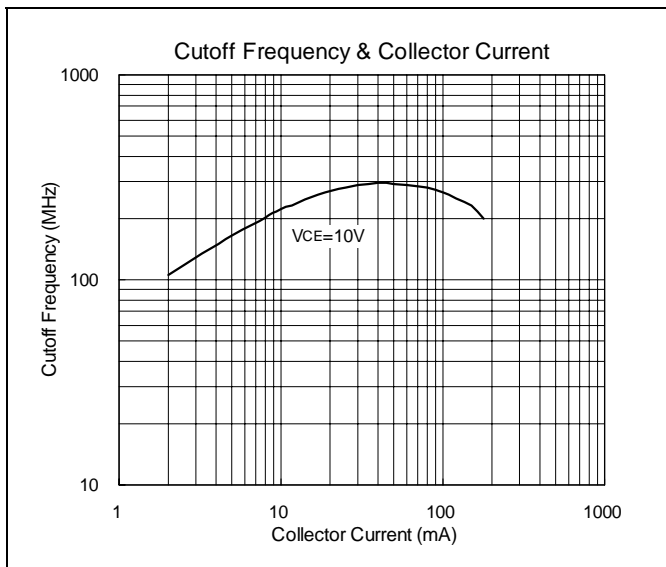
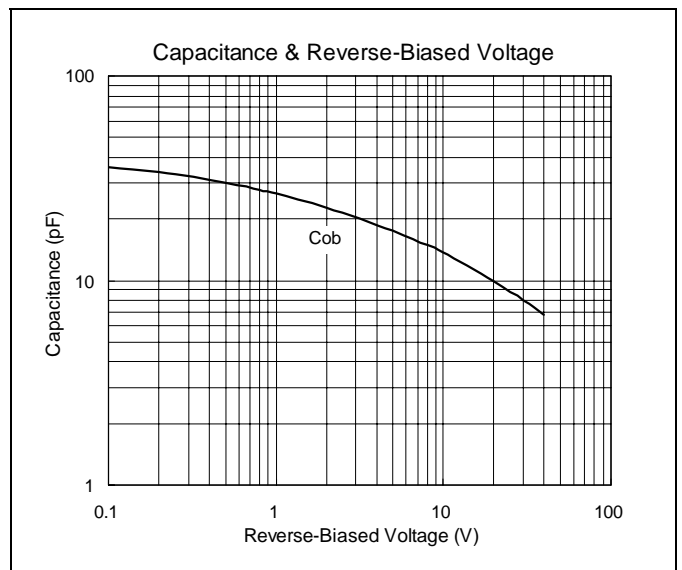
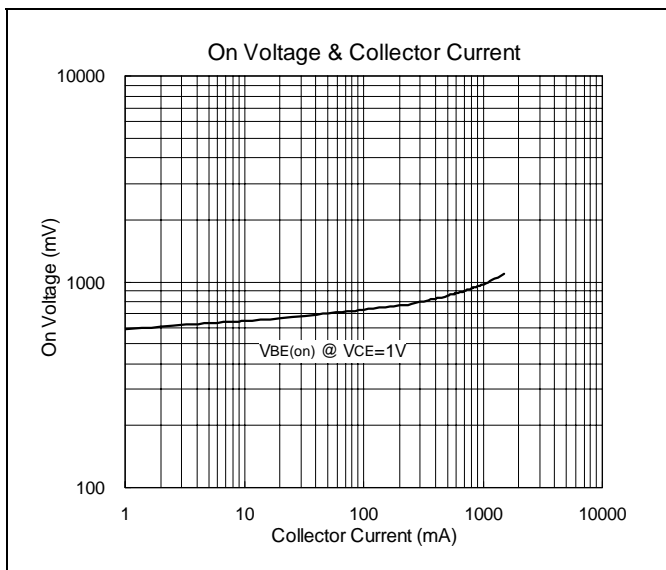
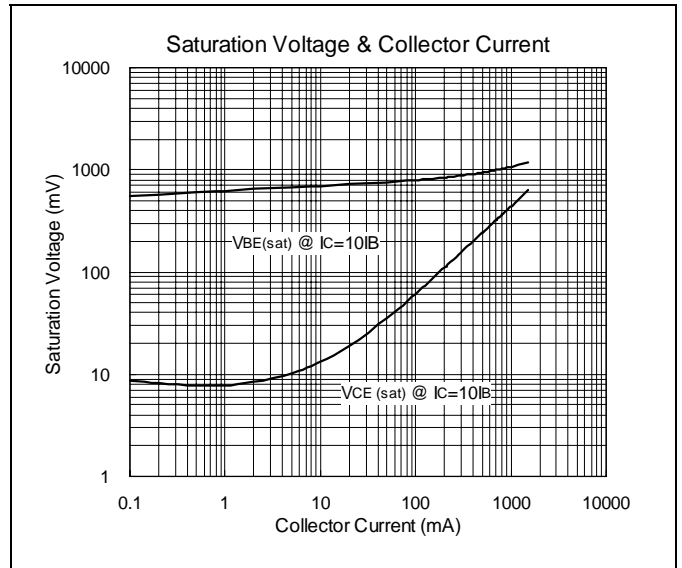
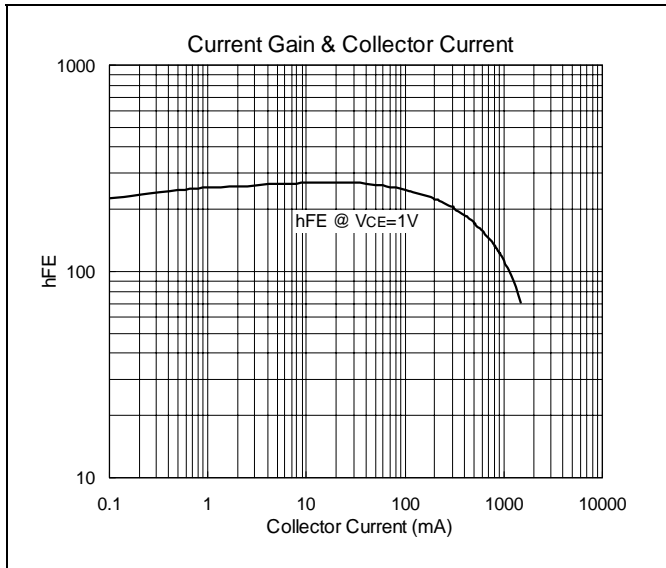
*Pulse Test : Pulse Width ≤380us, Duty Cycle≤2%

Classification on hFE2

Rank	B	C	D	E
Range	85-160	120-200	190-300	250-500

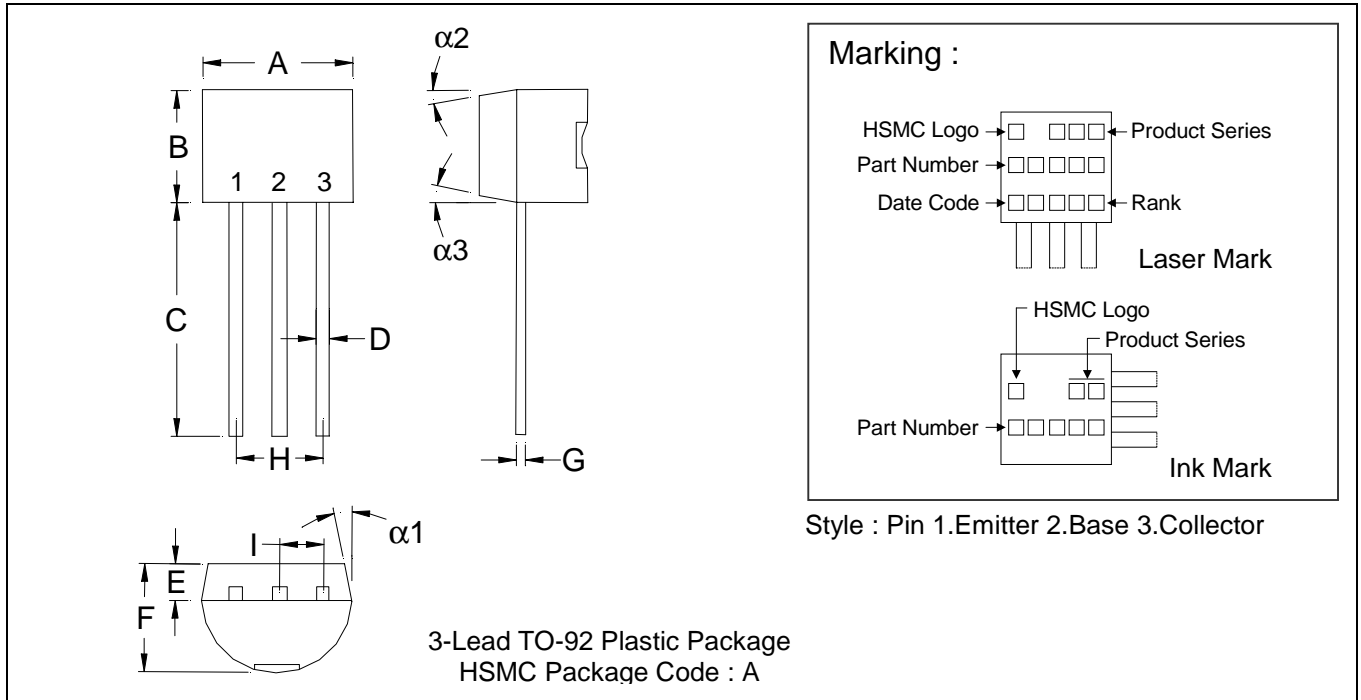


Characteristics Curve





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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