



HA8050

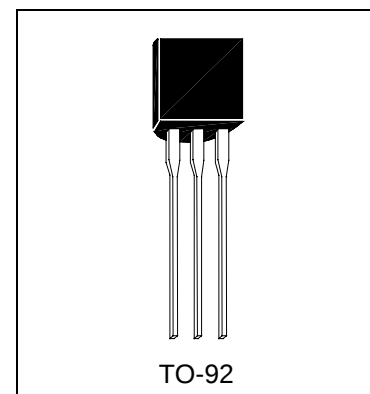
NPN EPITAXIAL PLANAR TRANSISTOR

Description

The HA8050 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 HA8550



TO-92

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 500 mA

Characteristics (Ta=25°C)

Symbol	Min.	Typ.	Max.	Unit	Test Conditions
BVCEO	40	-	-	V	IC=100uA
BVCEO	25	-	-	V	IC=2mA
BVEBO	6	-	-	V	IE=100uA
ICBO	-	-	100	nA	VCB=35V
IEBO	-	-	100	nA	VEB=6V
*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

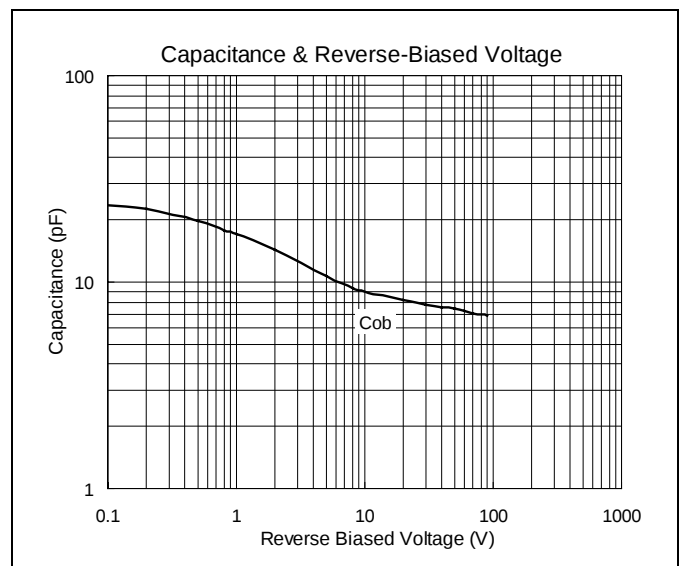
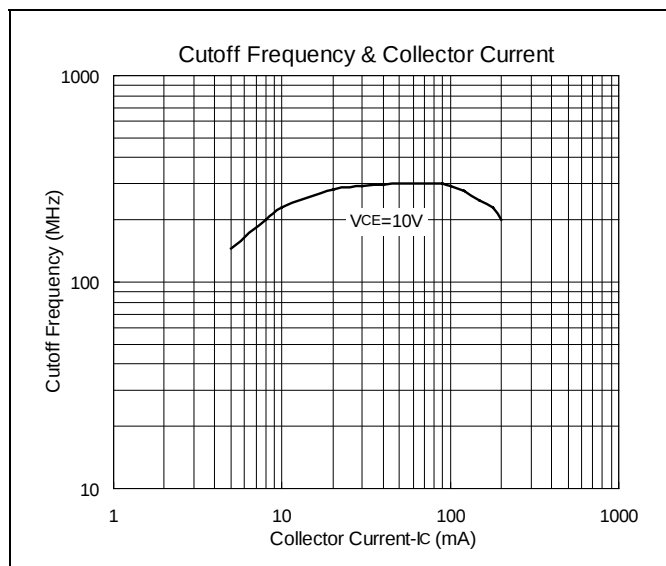
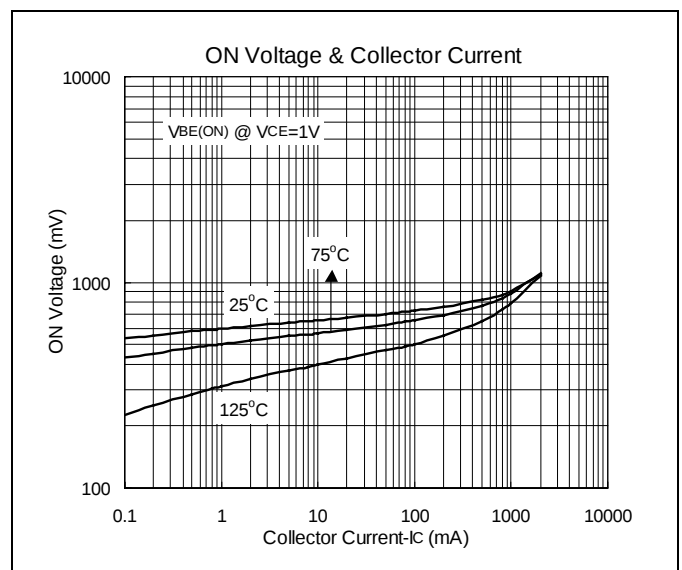
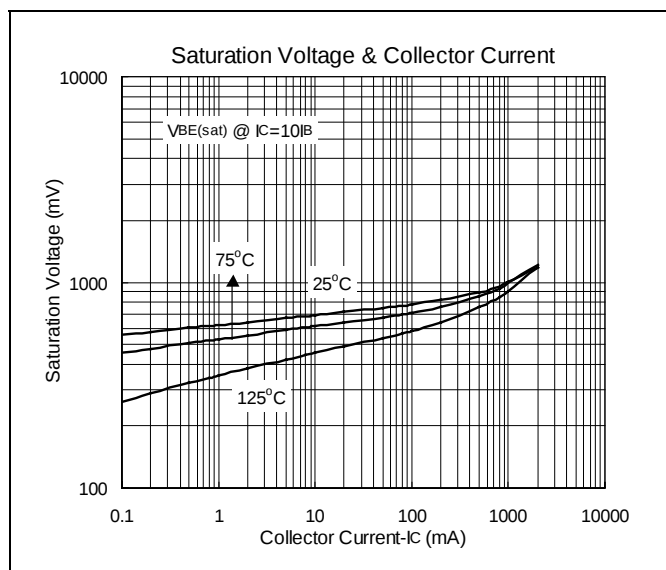
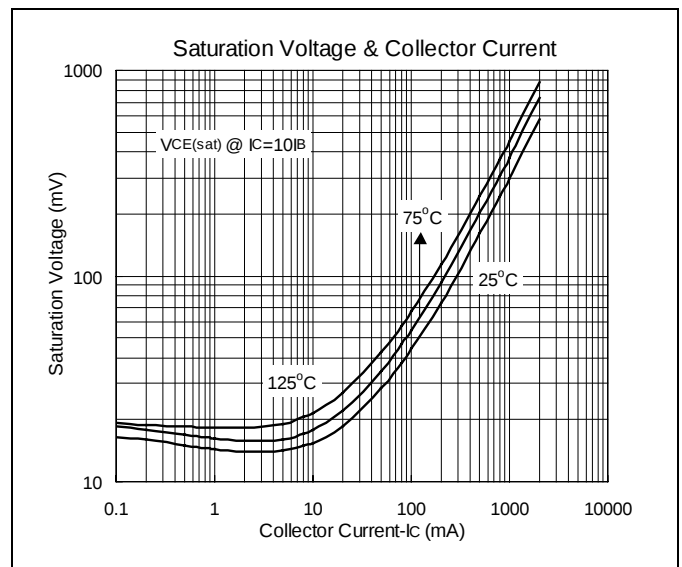
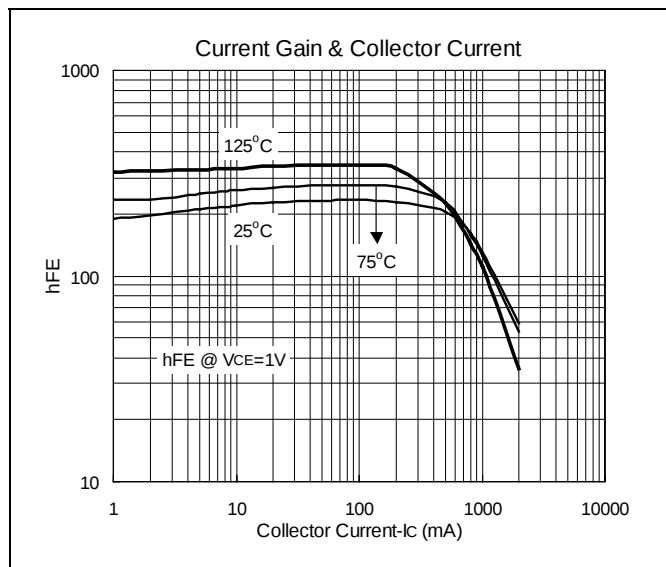
*Pulse Test: Pulse Width ≤380us, Duty Cycles≤2%

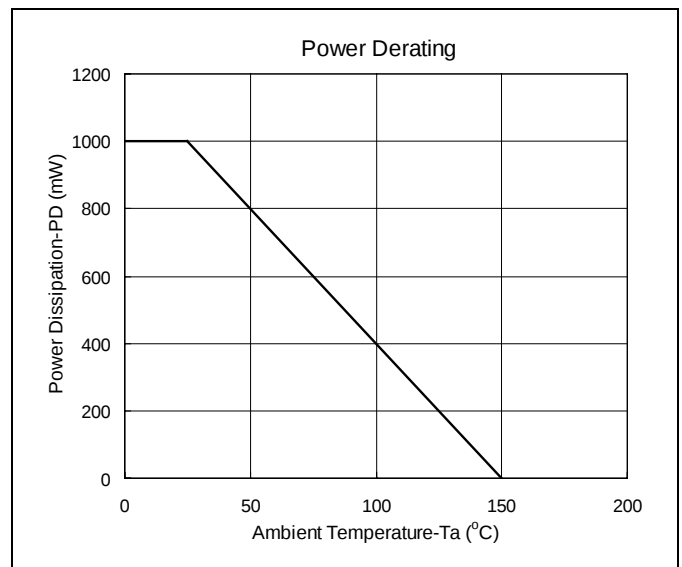
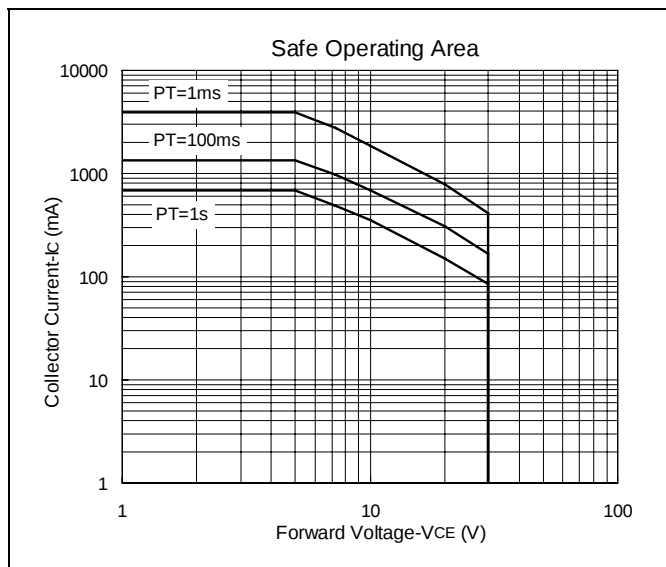
Classification on hFE2

Rank	B	C	D	E
Range	85-160	120-200	160-320	250-500



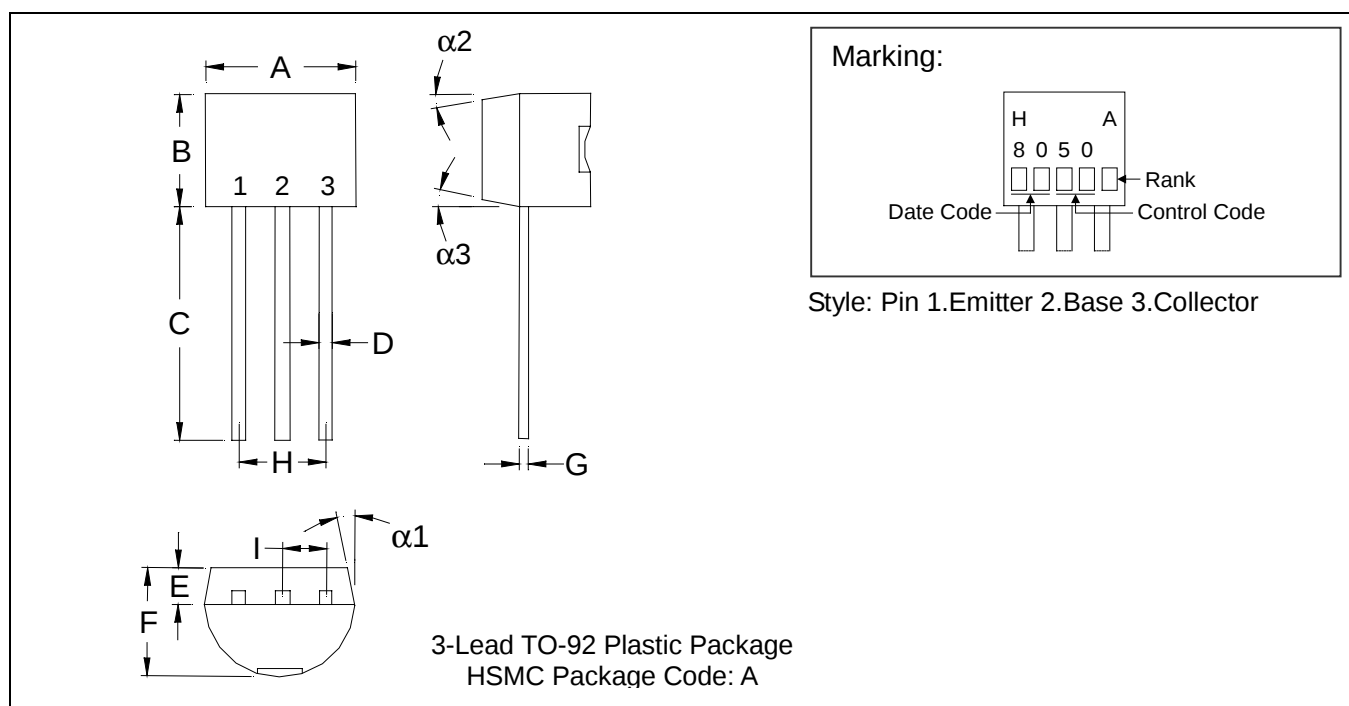
Characteristics Curve







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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