



HBF422

NPN EPITAXIAL PLANAR TRANSISTOR

Description

Video B-class Power stages in TV-receivers

Absolute Maximum Ratings

- Maximum Temperatures
Storage Temperature -55 ~ +150 °C
Junction Temperature +150 °C Maximum
- Maximum Power Dissipation
Total Power Dissipation (Ta=25°C)..... 625 mW
- Maximum Voltages and Currents (Ta=25°C)
VCBO Collector to Base Voltage..... 250 V
VCEO Collector to Emitter Voltage 250 V
VEBO Emitter to Base Voltage..... 5 V
IC Collector Current50 mA
IC Collector Current (Pulse)..... 100 mA
IB Base Current (Pulse)..... 50 mA

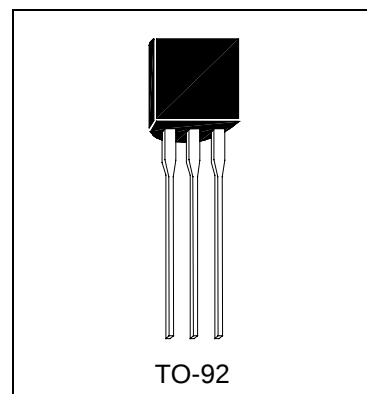
Electrical Characteristics (Ta=25°C)

Symbol	Min.	Typ.	Max.	Unit	Test Conditions
BVCBO	250	-	-	V	IC=100uA
BVCEO	250	-	-	V	IC=1mA
BVEBO	5	-	-	V	IE=10uA
ICBO	-	-	100	nA	VCB=200V
IEBO	-	-	50	nA	VEB=5V
*VCE(sat)	-	-	0.6	V	IC=30mA, IB=3mA
*hFE	50	-	-		VCE=20V, IC=25mA
fT	60	-	-	MHz	IE=10mA, VCE=10V, f=100MHz

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

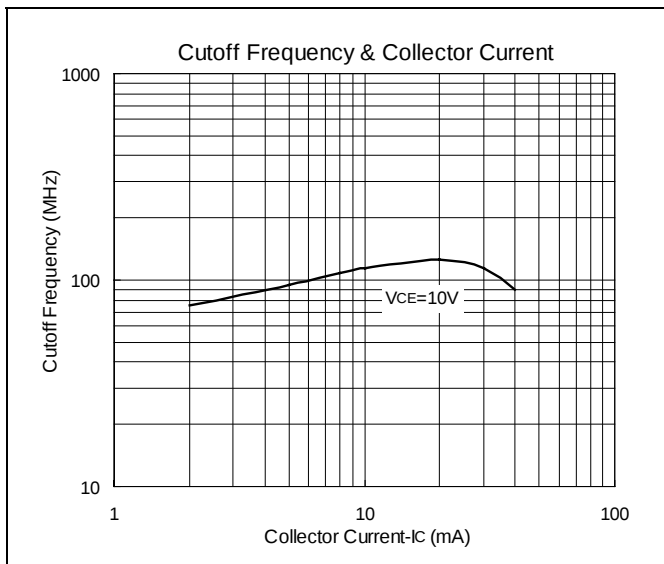
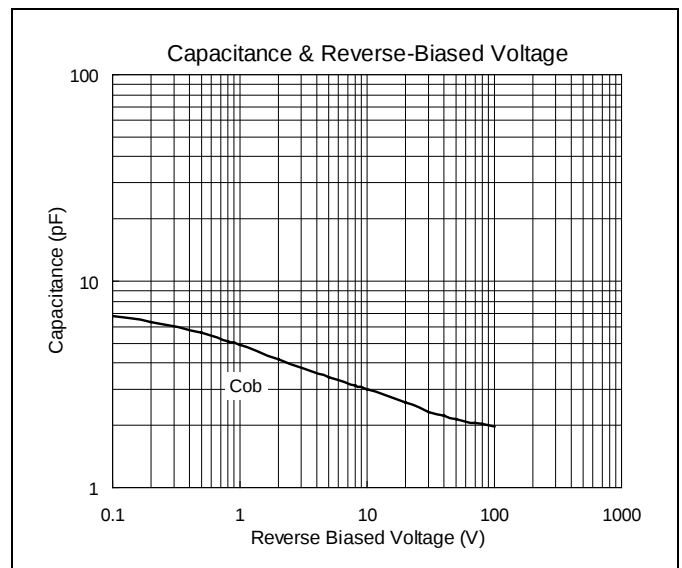
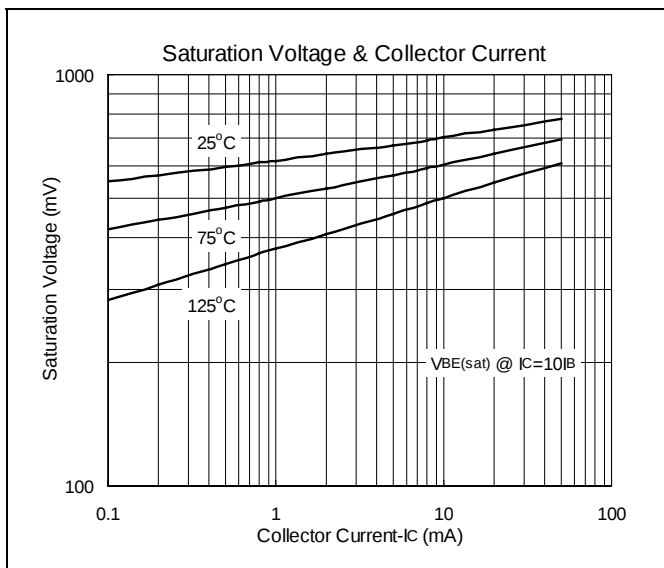
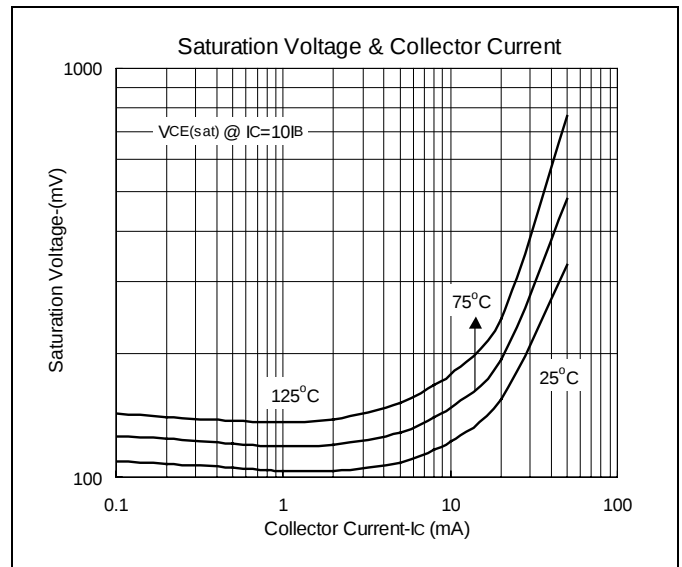
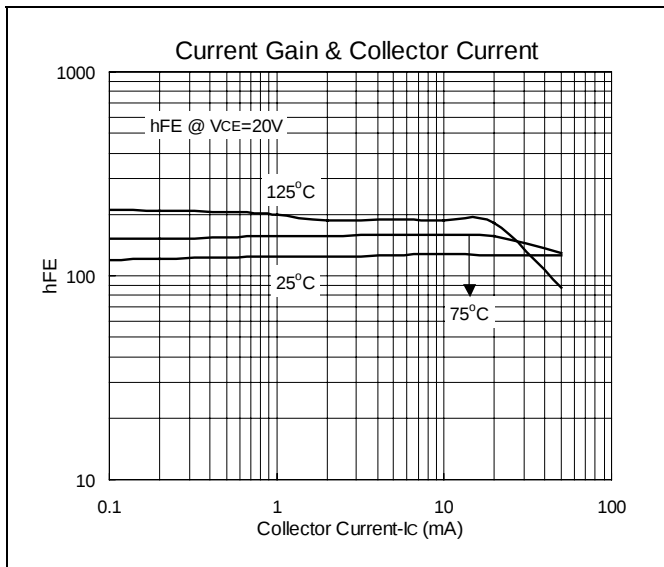
Thermal Characteristics

Symbol	Parameter	Value	Unit
Rth-ja	Thermal resistance from junction to ambient	200	°C/W



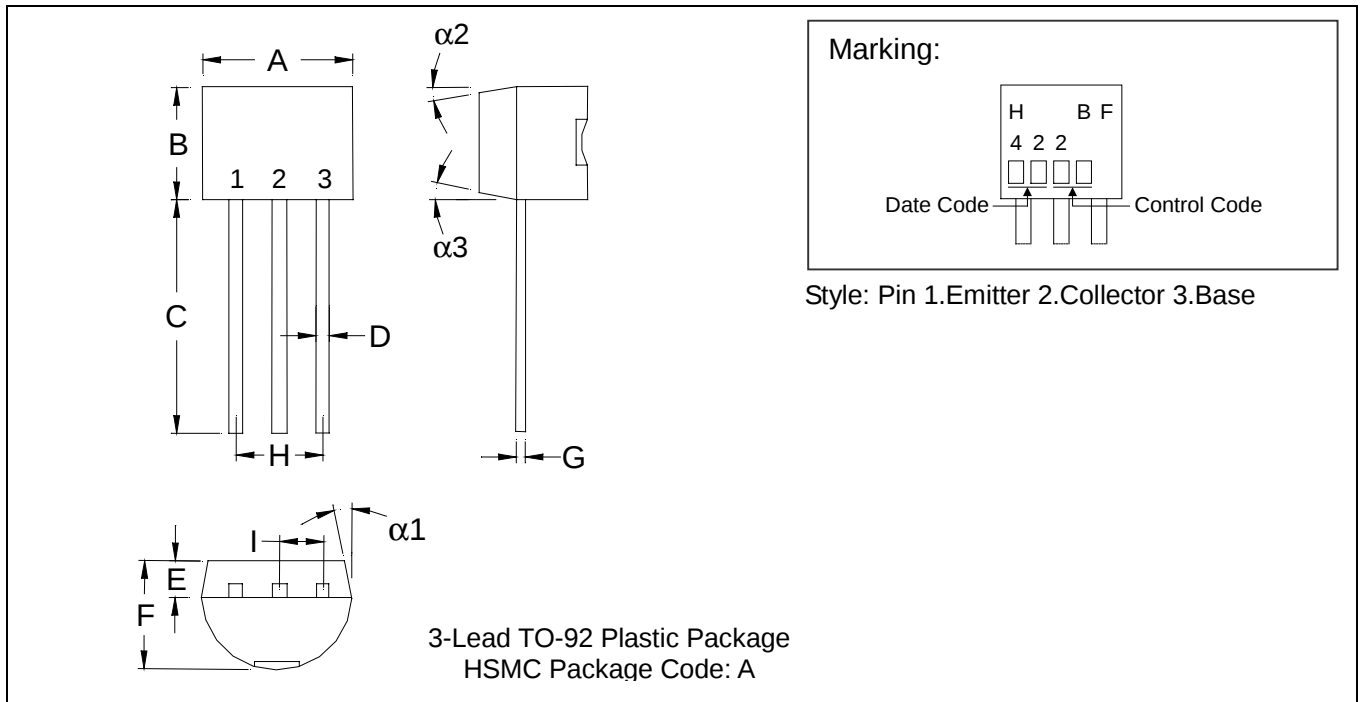


Characteristics Curve





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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