



HMP SH10

NPN EPITAXIAL PLANAR TRANSISTOR

Description

The HMP SH10 is designed for use in VHF & UHF oscillators and VHF mixer in tuner of a TV receiver.

Features

- High frequency
- Very low capacitance

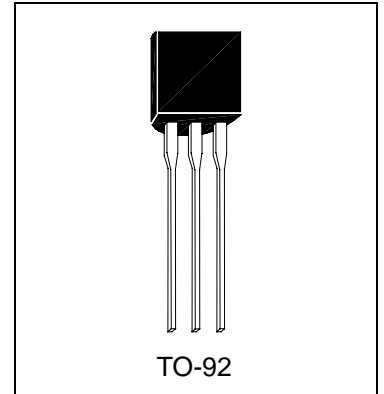
Absolute Maximum Ratings

- Maximum Temperatures
 Storage Temperature -55 ~ +150 °C
 Junction Temperature..... +150 °C
- Maximum Power Dissipation
 Total Power Dissipation (Ta=25°C) 625 mW
- Maximum Voltages and Currents (Ta=25°C)
 VCBO Collector to Base Voltage 20 V
 VCEO Collector to Emitter Voltage..... 15 V
 VEBO Emitter to Base Voltage..... 3 V
 IC Collector Current 50 mA

Characteristics (Ta=25°C)

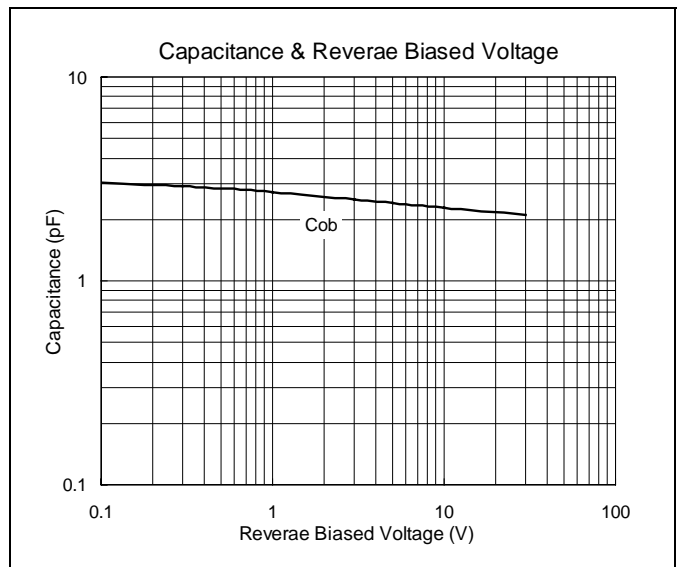
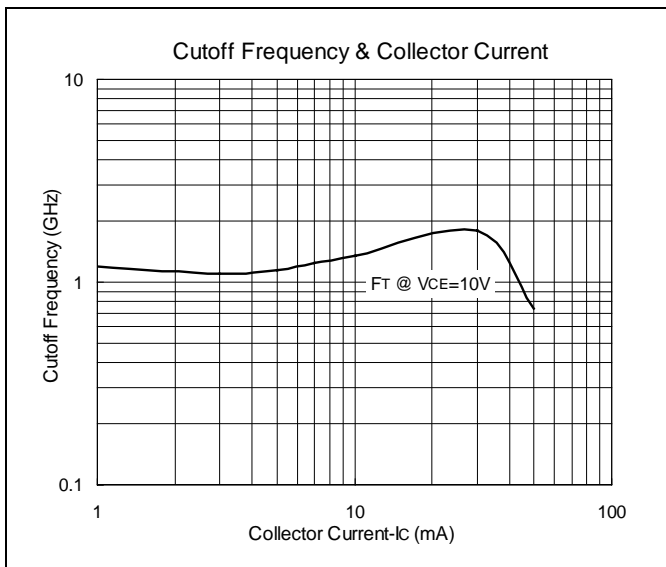
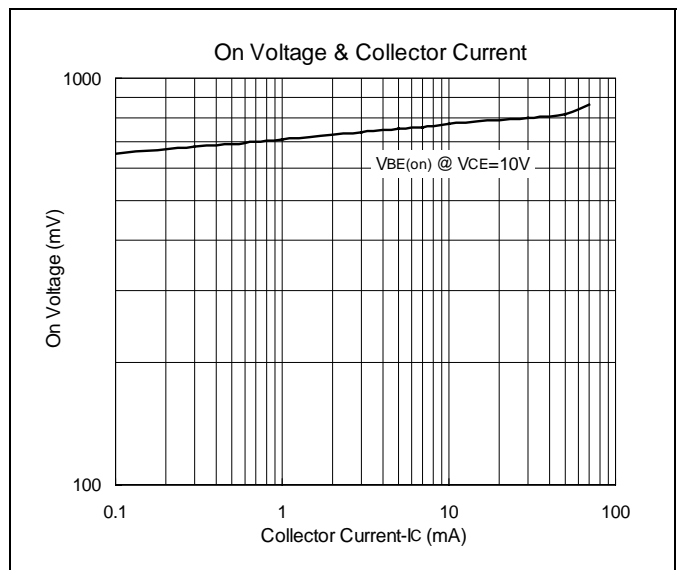
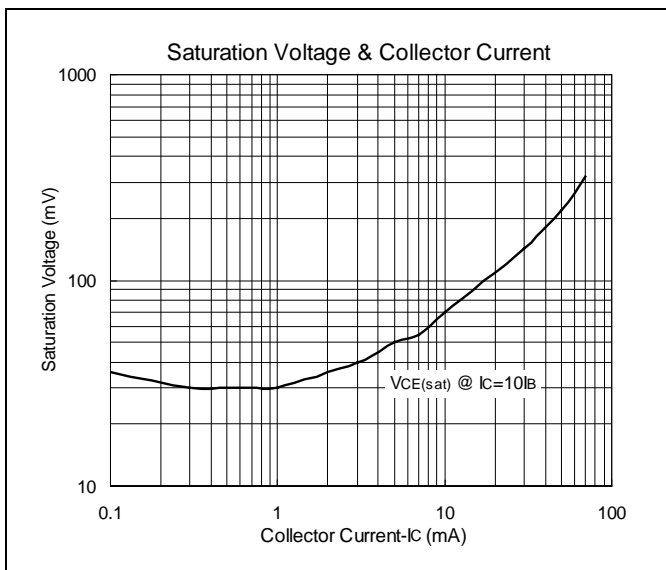
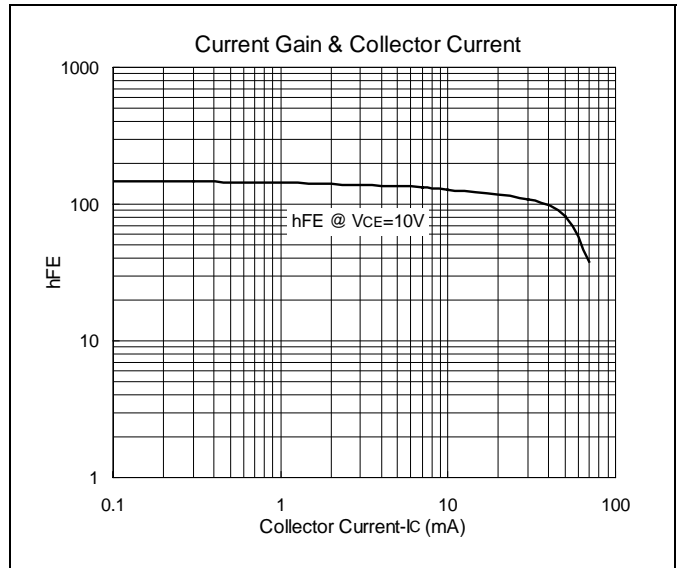
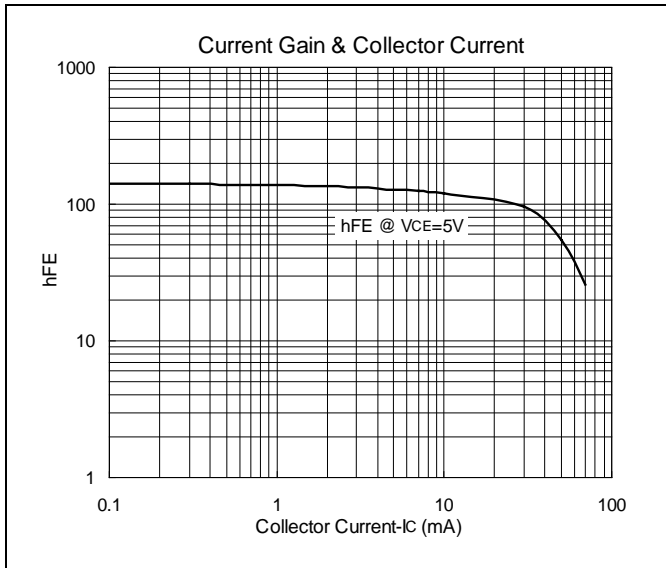
Symbol	Min.	Typ.	Max.	Unit	Test Conditions
BVCBO	20	-	-	V	IC=100uA
BVCEO	15	-	-	V	IC=1mA
BVEBO	3	-	-	V	IC=10uA
ICBO	-	-	100	nA	VCB=20V
IEBO	-	-	100	nA	VEB=2V
*VCE(sat)	-	-	500	mV	IC=4mA, IB=0.4mA
VBE(on)	-	-	0.95	V	VCE=10V, IC=4mA
*hFE	60	-	-		VCE=10V, IC=4mA
Cob	-	1.5	-	pF	VCB=10V, f=1MHz
fT	650	-	-	MHz	VCB=10V, IC=4mA, f=100MHz

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



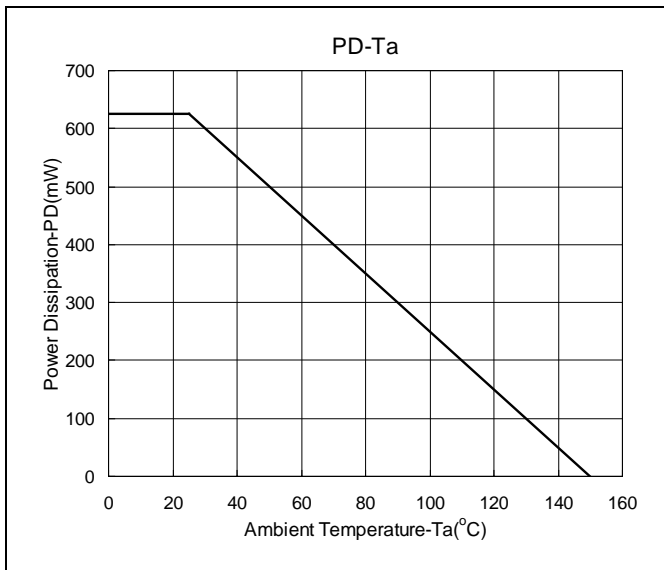


Characteristics Curve



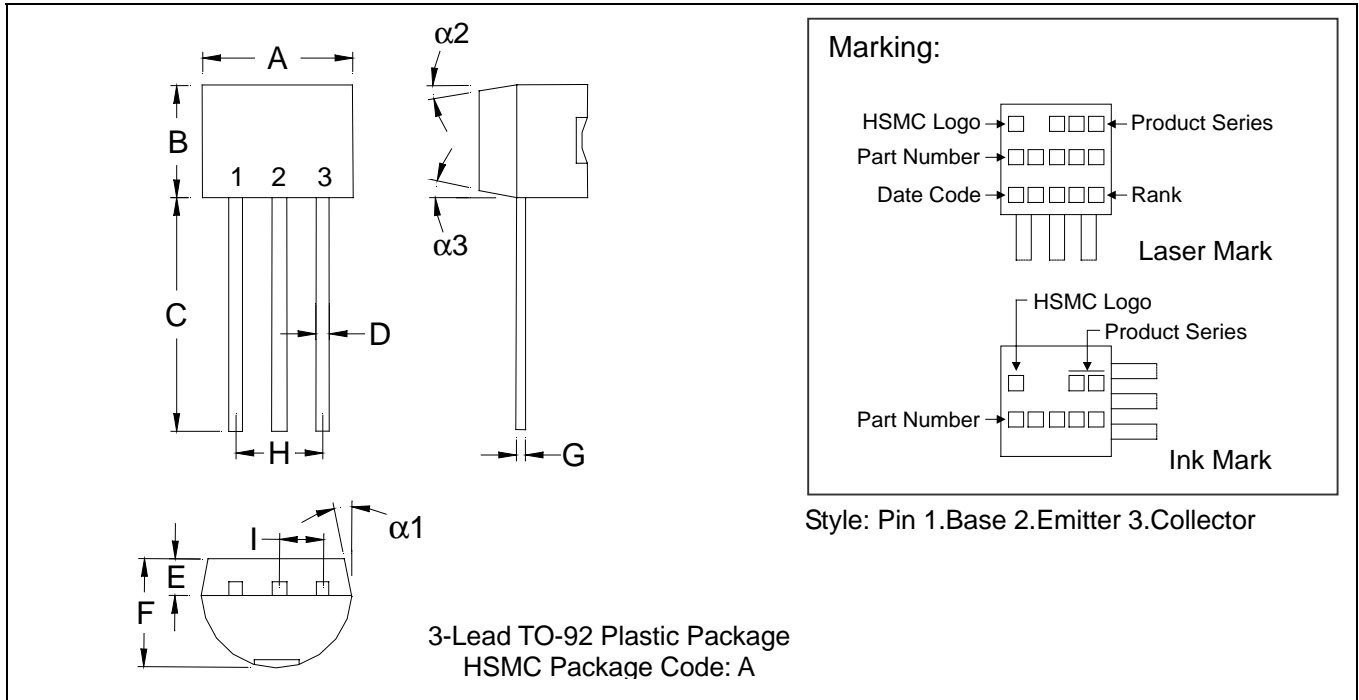


Characteristics Curve





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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