



# HSA733SP

PNP EPITAXIAL PLANAR TRANSISTOR

## Description

The HSA733 is designed for use in driver stage of AF amplifier.

## Features

- High hFE and Excellent Linearity: 200 Typ. hFE(VCE=6.0,IC=1.0mA)

## Absolute Maximum Ratings

- Maximum Temperatures  
 Storage Temperature ..... -55 ~ +150 °C  
 Junction Temperature..... +150 °C Maximum
- Maximum Power Dissipation  
 Total Power Dissipation (Ta=25°C) ..... 250 mW
- Maximum Voltages and Currents (Ta=25°C)  
 VCBO Collector to Base Voltage ..... -60 V  
 VCEO Collector to Emitter Voltage..... -50 V  
 VEBO Emitter to Base Voltage ..... -5 V  
 IC Collector Current..... -100 mA  
 IB Base Current..... -20 mA

## Characteristics (Ta=25°C)

Symbol	Min.	Typ.	Max.	Unit	Test Conditions
BVCBO	-60	-	-	V	IC=-100uA
BVCEO	-50	-	-	V	IC=-1mA
BVEBO	-5	-	-	V	IE=-10uA
ICBO	-	-	-0.1	uA	VCB=-60V, IC=0
IEBO	-	-	-0.1	uA	VEB=-5V, IC=0
*VCE(sat)	-	-0.18	-0.3	V	IC=-100mA, IB=-10mA
VBE(on)	-0.55	-0.62	-0.7	V	IC=-1mA, VCE=-6V
*hFE	90	200	600		VCE=-6V, IC=-1mA
fT	100	180	-	MHz	IC=-1mA, VCE=-6V
Cob	-	4.5	6.0	pF	IE=0, VCB=-10V, f=1MHz

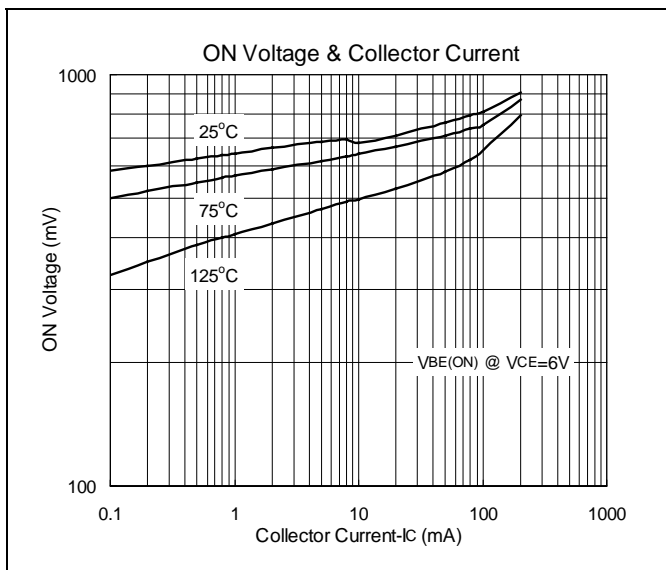
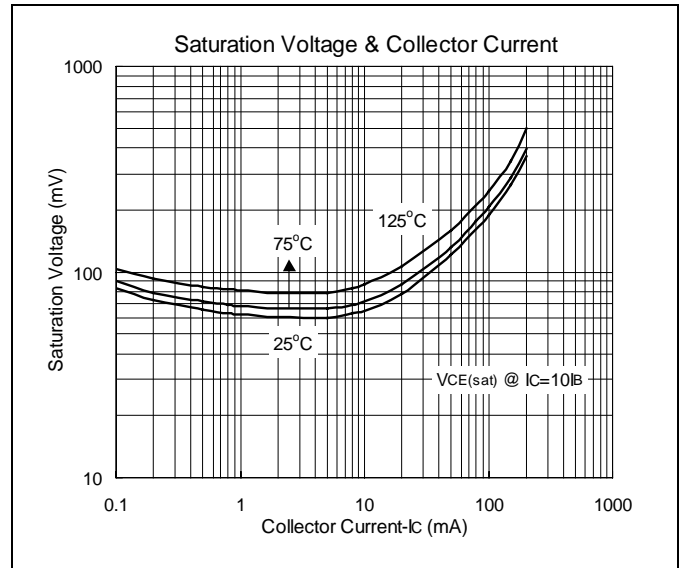
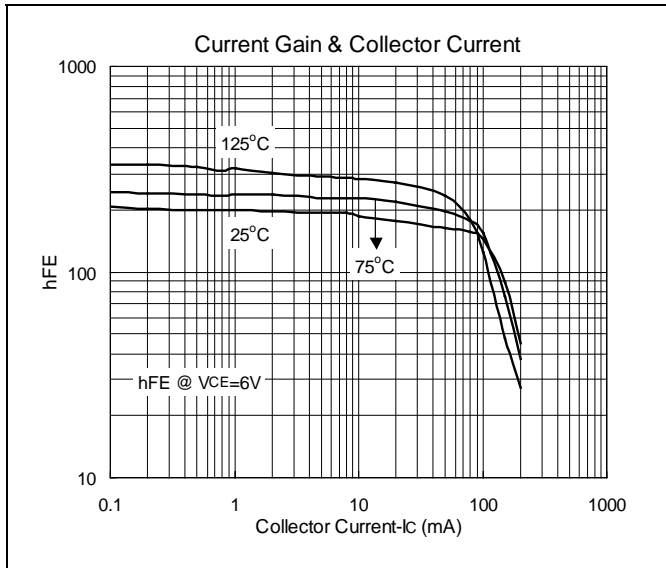
\*Pulse Test: Pulse Width ≤380us, Duty Cycle≤2%

## Classification Of hFE1

Rank	R	Q	P	K
Range	90-180	135-270	200-400	300-600



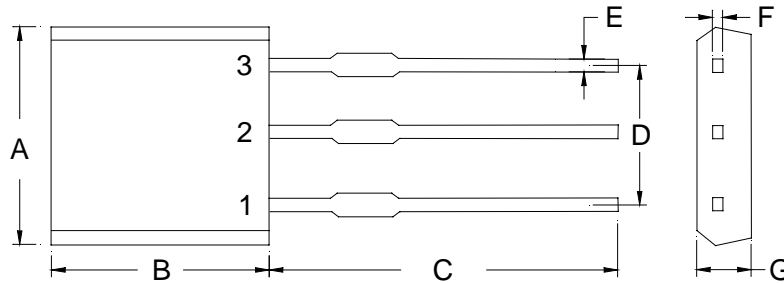
### Characteristics Curve





### TO-92SP Dimension

Style: Pin 1.Emitter 2.Collector 3.Base



3-Lead TO-92SP Plastic Package, HSMC Package Code: SP

\*: Typical

DIM	Inches		Millimeters		DIM	Inches		Millimeters	
	Min.	Max.	Min.	Max.		Min.	Max.	Min.	Max.
A	0.1450	0.1650	3.70	4.20	E	0.0160	0.0240	0.41	0.61
B	0.1063	0.1300	2.70	3.30	F	-	*0.0150	-	*0.38
C	0.5000	-	12.7	-	G	0.0800	0.1050	2.03	2.67
D	-	*0.1000	-	*2.54					

- Notes: 1.Dimension and tolerance based on our Spec. dated Sep. 07,1997.  
 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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