



HSC1959SP

NPN EPITAXIAL PLANAR TRANSISTOR

Description

The HSC1959Y is designed for audio frequency Low power amplifier applications.

Features

- Excellent hFE linearity
- Complementary to HSA562

Absolute Maximum Ratings

- Maximum Temperatures
 Storage Temperature -55 ~ +150 °C
 Junction Temperature 150 °C Maximum
- Maximum Power Dissipation
 Total Power Dissipation (Ta=25°C) 500 mW
- Maximum Voltages and Currents (Ta=25°C)
 VCBO Collector to Base Voltage 35 V
 VCEO Collector to Emitter Voltage 30 V
 VEBO Emitter to Base Voltage 5 V
 IC Collector Current 500 mA

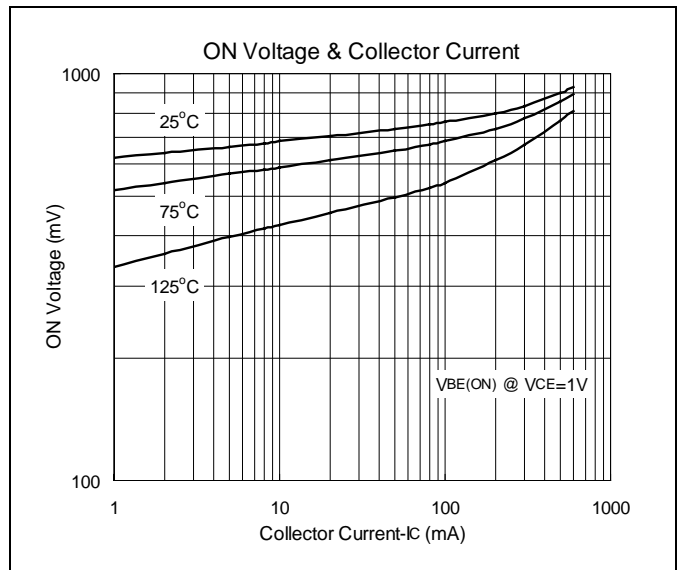
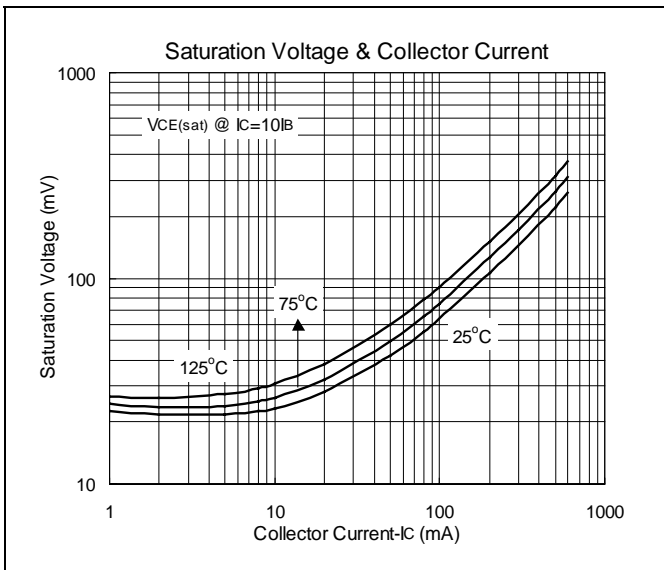
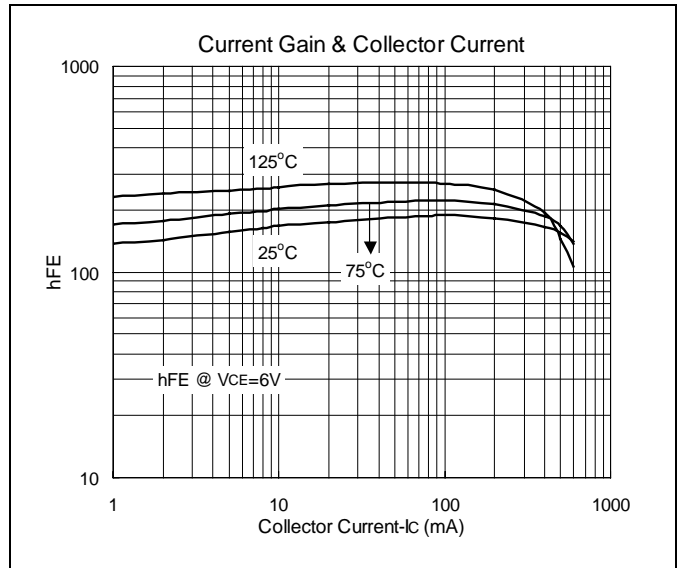
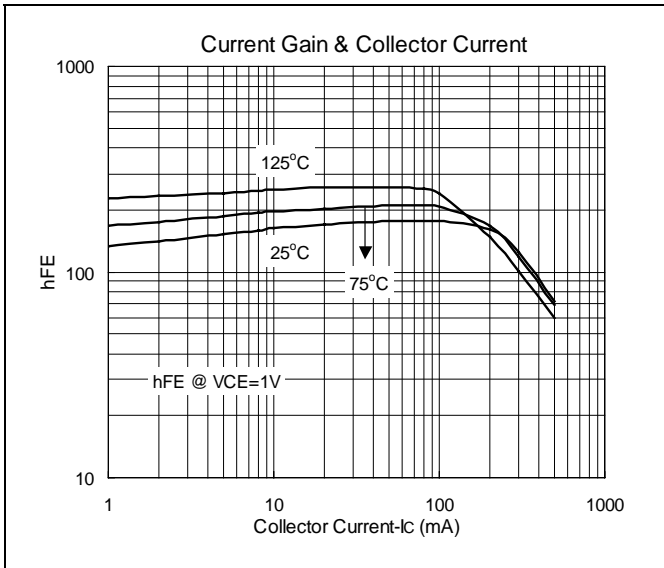
Characteristics (Ta=25°C)

Symbol	Min.	Typ.	Max.	Unit	Test Conditions
BVCBO	35	-	-	V	IC=100uA
BVCEO	30	-	-	V	IC=1mA
ICBO	-	-	100	nA	VCB=35V
IEBO	-	-	100	nA	VEB=5V
*VCE(sat)	-	-	0.25	V	IC=100mA, IB=10mA
*VBE(on)	-	-	1	V	VCE=1V, IC=100mA
*hFE1	120	-	240		VCE=1V, IC=100mA
*hFE2	40	-	-		VCE=6V, IC=400mA
fT	-	300	-	MHz	IC=20mA, VCE=6V
Cob	-	7	-	pF	IE=0, VCB=6V, f=1MHz

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



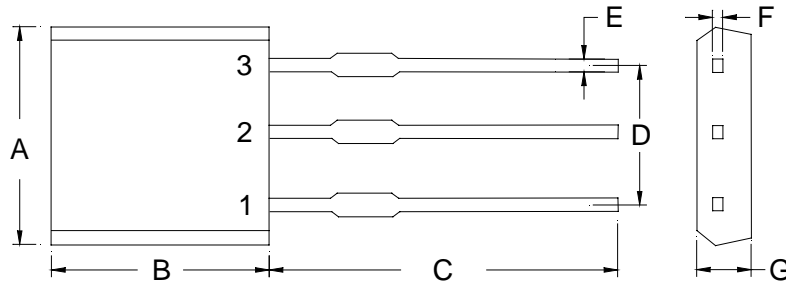
Characteristics Curve





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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