



HSC945SP

NPN EPITAXIAL PLANAR TRANSISTOR

Description

The HSC945 is designed for using driver stage of AF amplifier and low speed switching applications.

Absolute Maximum Ratings

- Maximum Temperatures
 Storage Temperature -55 ~ +150 °C
 Junction Temperature +150 °C Maximum
- Maximum Power Dissipations
 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 50 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	-	-	100	nA	VCB=60V, IE=0
IEBO	-	-	100	nA	VEB=5V, IB=0
*VCE(sat)	-	0.1	0.25	V	IC=100mA, IB=10mA
*hFE1	50	-	-		VCE=6V, IC=0.1mA
*hFE2	135	-	600		VCE=6V, IC=1mA
fT	150	-	600	MHz	IC=1mA, VCE=10V, f=100MHz
Cob	-	-	4	pF	IE=0, VCB=10V, f=1MHz

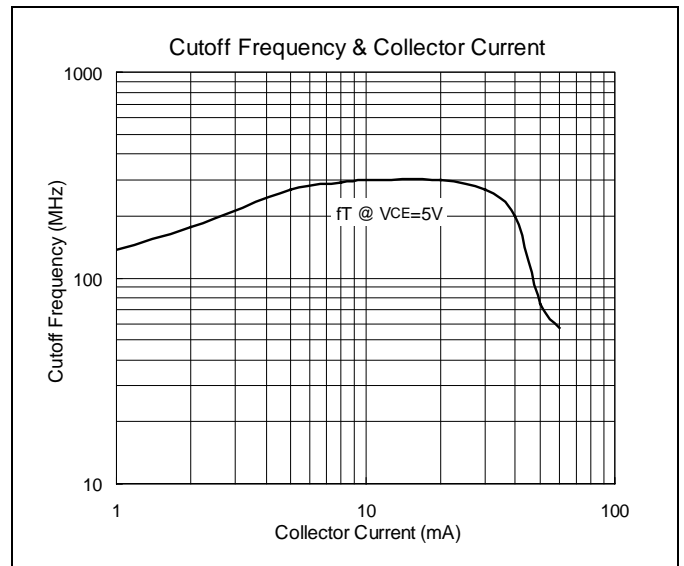
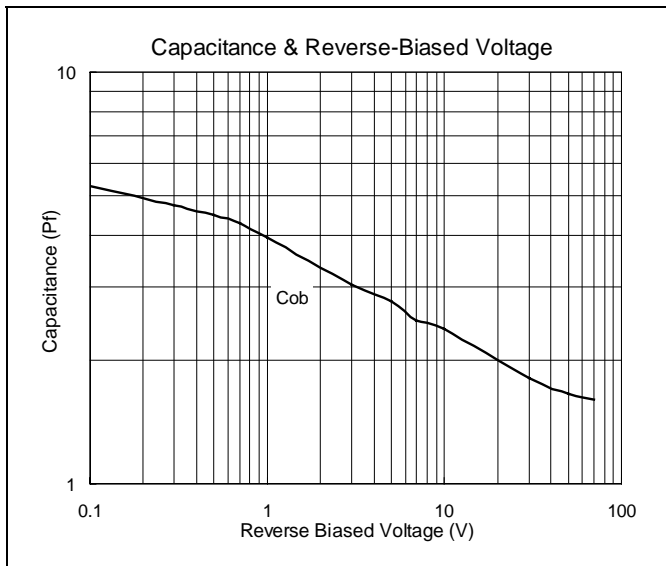
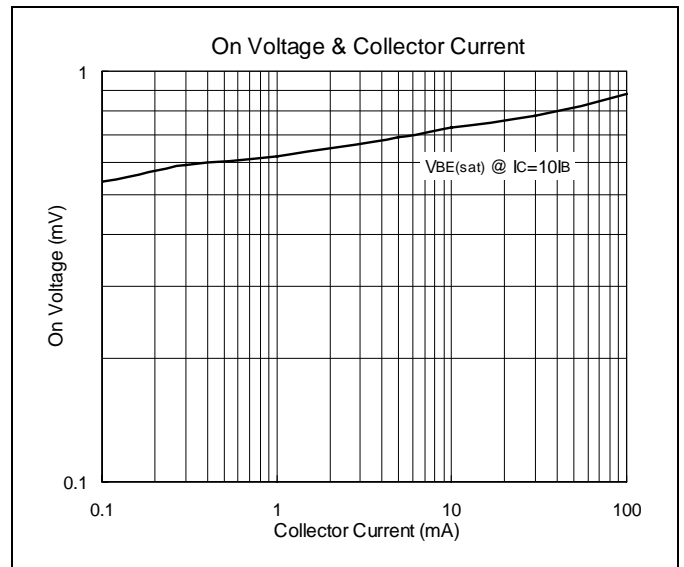
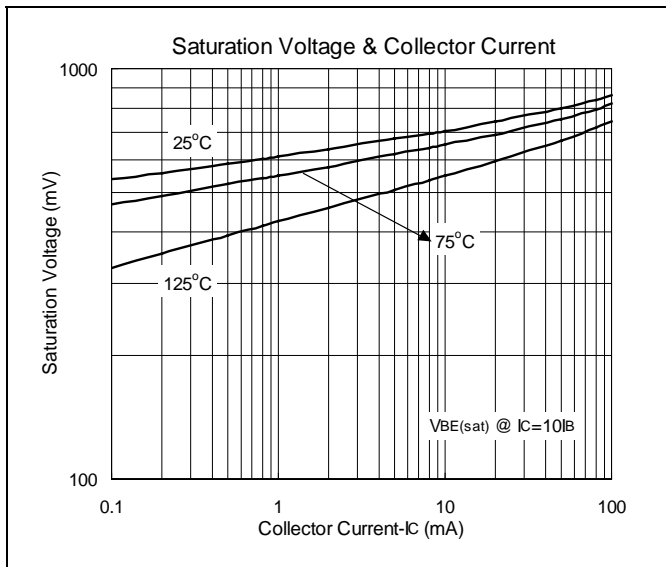
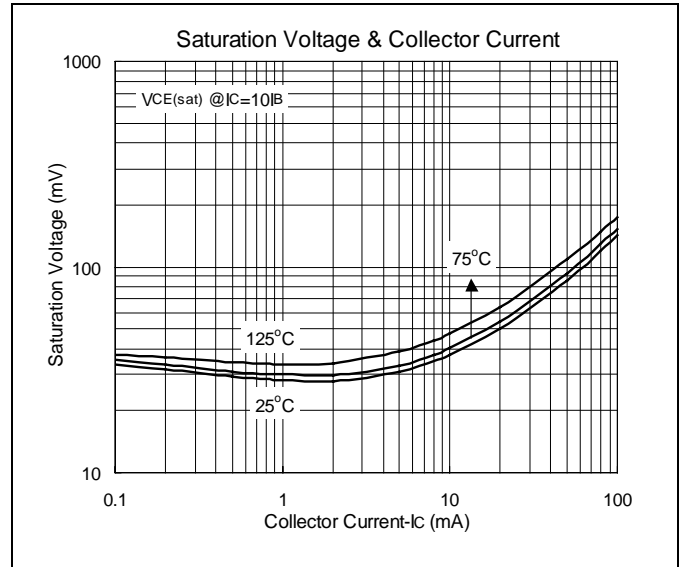
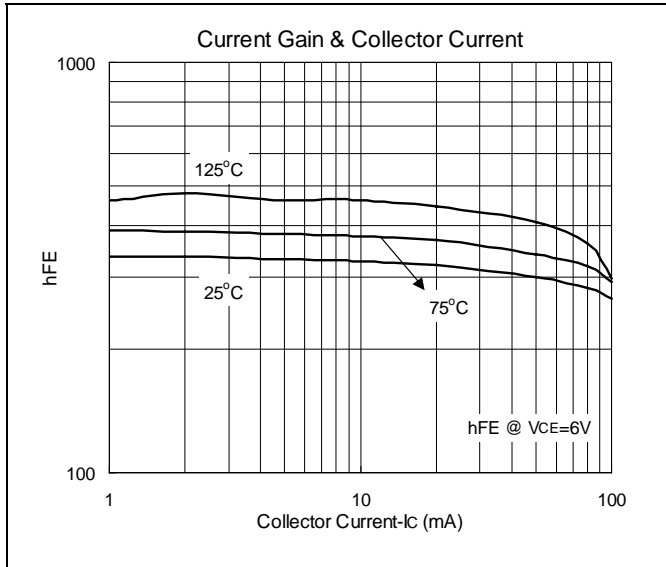
*Pulse Test: Pulse Width ≤380us, Duty Cycle≤2%

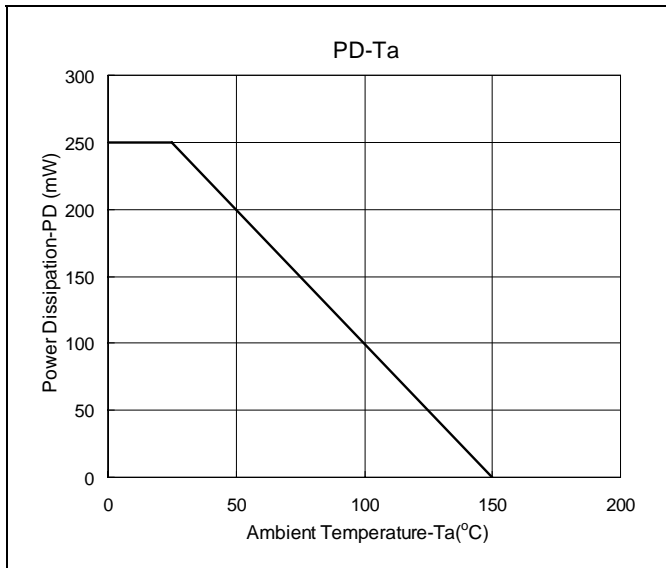
Classification of hFE2

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



Characteristics Curve

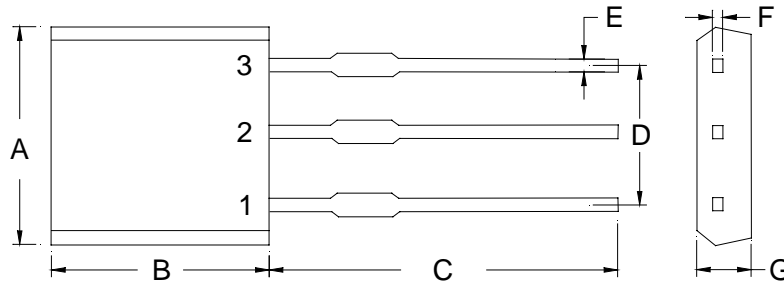






TO-92SP Dimension

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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