

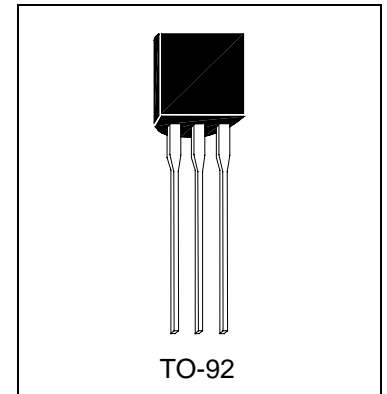


# HSD882S

NPN EPITAXIAL PLANAR TRANSISTOR

## Description

The HSD882S is suited for the output stage of 0.75W audio, voltage regulator, and relay driver.



## Absolute Maximum Ratings

- Maximum Temperatures  
 Storage Temperature ..... -55 ~ +150 °C  
 Junction Temperature ..... 150 °C Maximum
- Maximum Power Dissipation  
 Total Power Dissipation (Ta=25°C) ..... 750 mW
- Maximum Voltages and Currents (Ta=25°C)  
 VCB0 Collector to Base Voltage ..... 40 V  
 VCEO Collector to Emitter Voltage ..... 30 V  
 VEBO Emitter to Base Voltage ..... 5 V  
 IC Collector Current ..... 3 A

## Characteristics (Ta=25°C)

Symbol	Min.	Typ.	Max.	Unit	Test Conditions
BVCBO	40	-	-	V	IC=100uA, IE=0
BVCEO	30	-	-	V	IC=1mA, IB=0
BVEBO	5	-	-	V	IE=10uA, IC=0
ICBO	-	-	1	uA	VCB=30V, IE=0
IEBO	-	-	1	uA	VEB=3V, IC=0
*VCE(sat)	-	-	0.5	V	IC=2A, IB=200mA
*VBE(sat)	-	-	2	V	IC=2A, IB=200mA
*hFE1	30	-	-		VCE=2V, IC=20mA
*hFE2	100	-	500		VCE=2V, IC=1A
fT	-	90	-	MHz	VCE=5V, IC=0.1A, f=100MHz
Cob	-	45	-	pF	VCB=10V, f=1MHz, IE=0

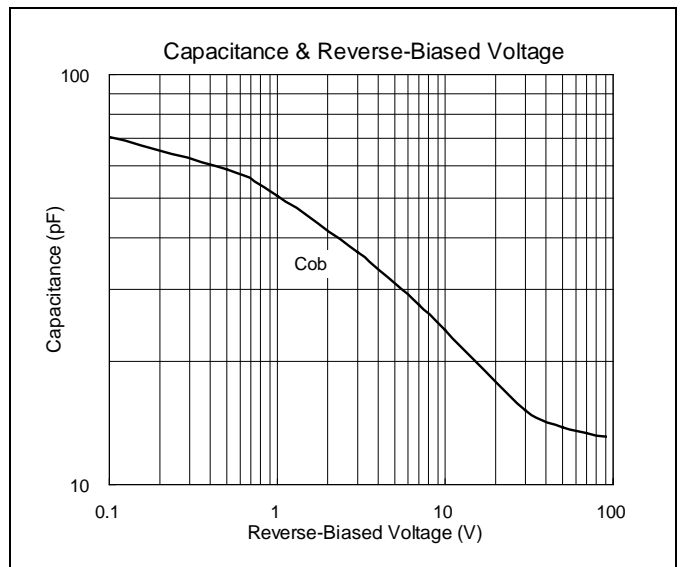
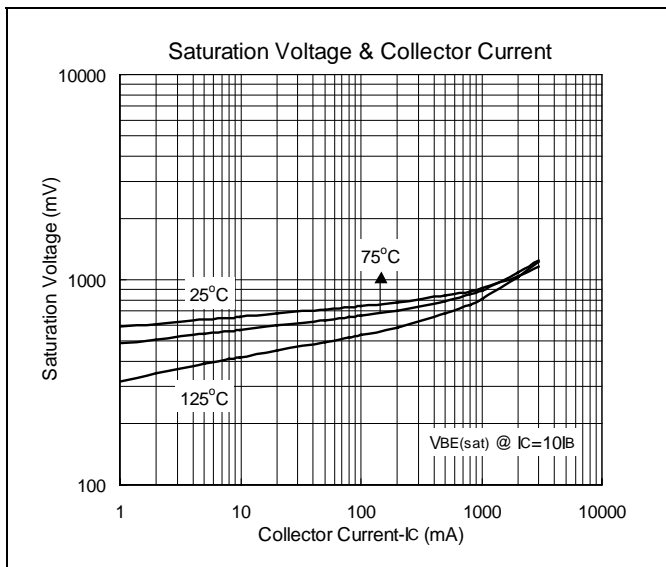
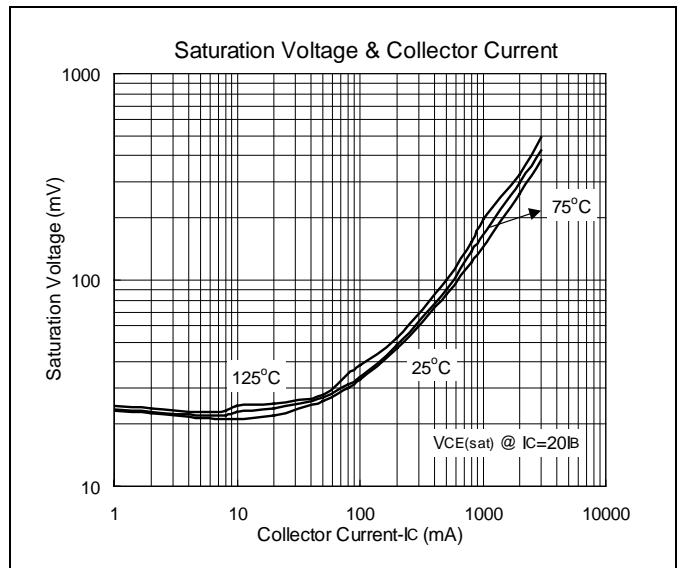
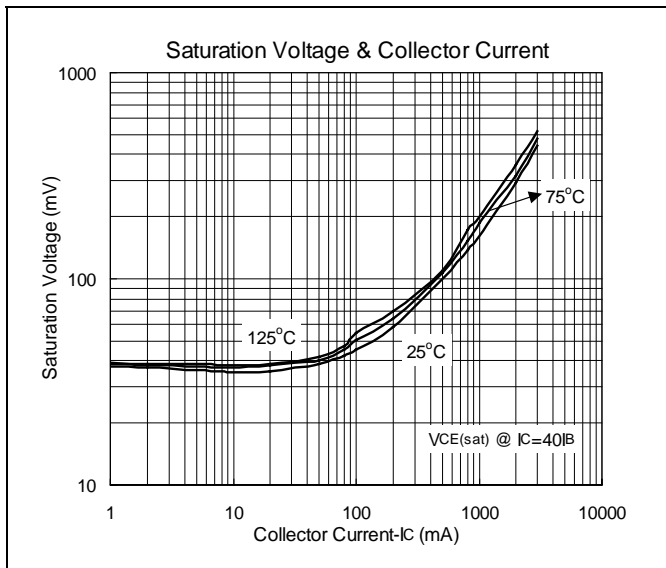
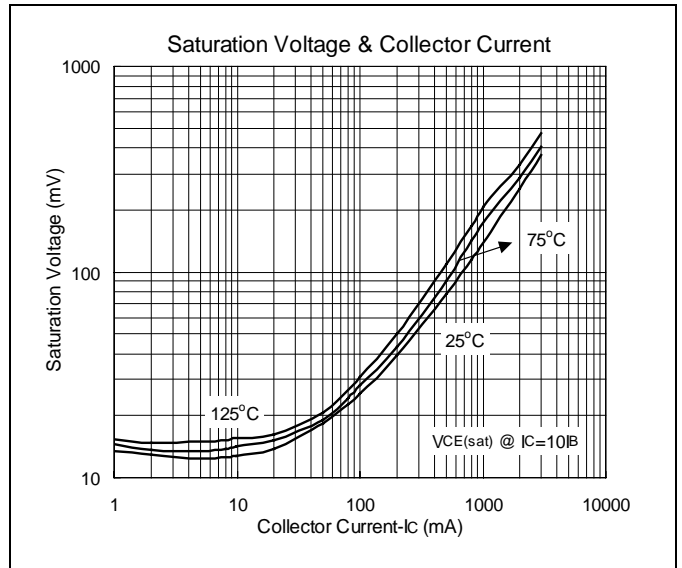
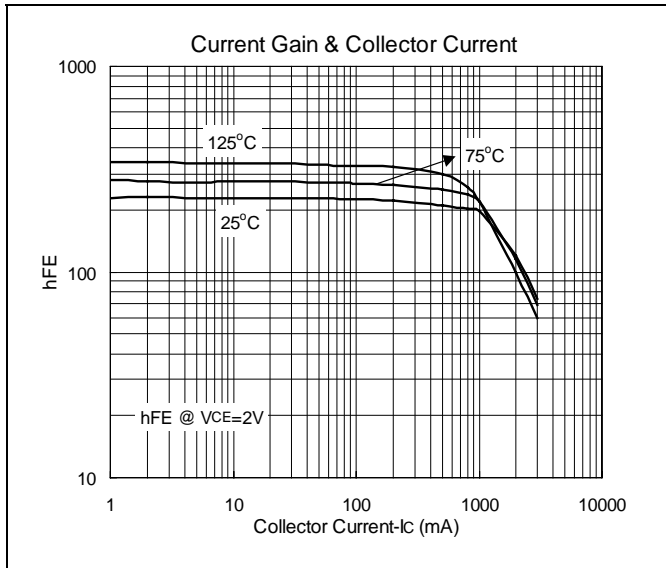
\*Pulse Test: Pulse Width ≤380us, Duty Cycle≤2%

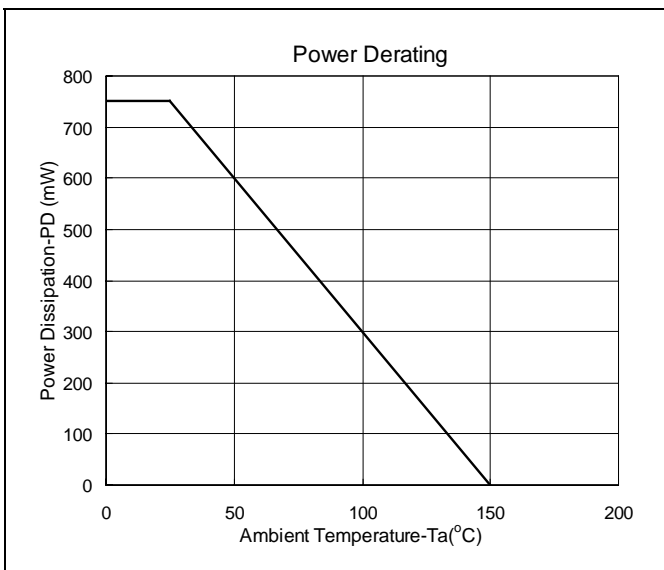
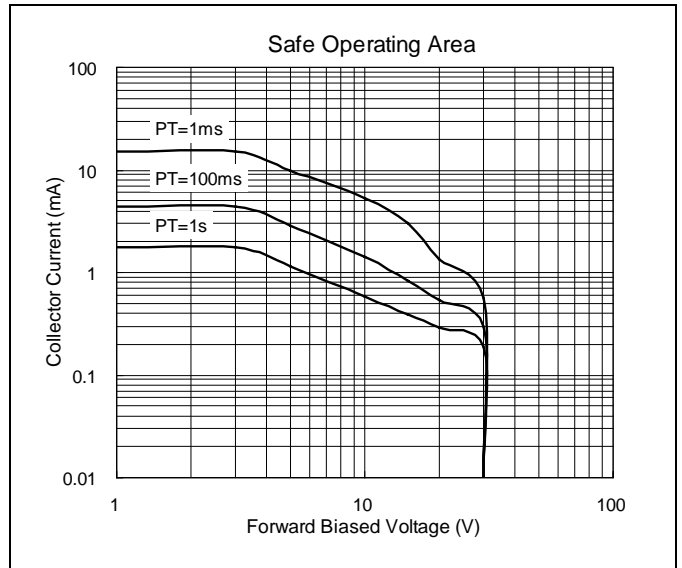
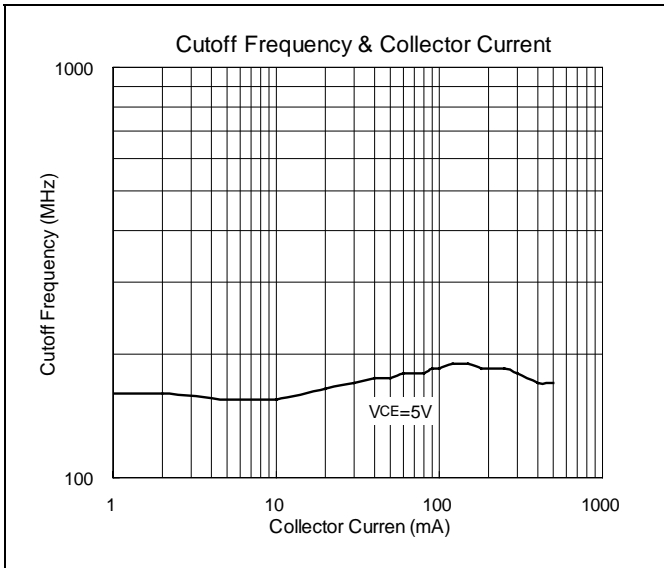
## Classification of hFE

Rank	Q	P	E
Range	100-200	160-320	250-500



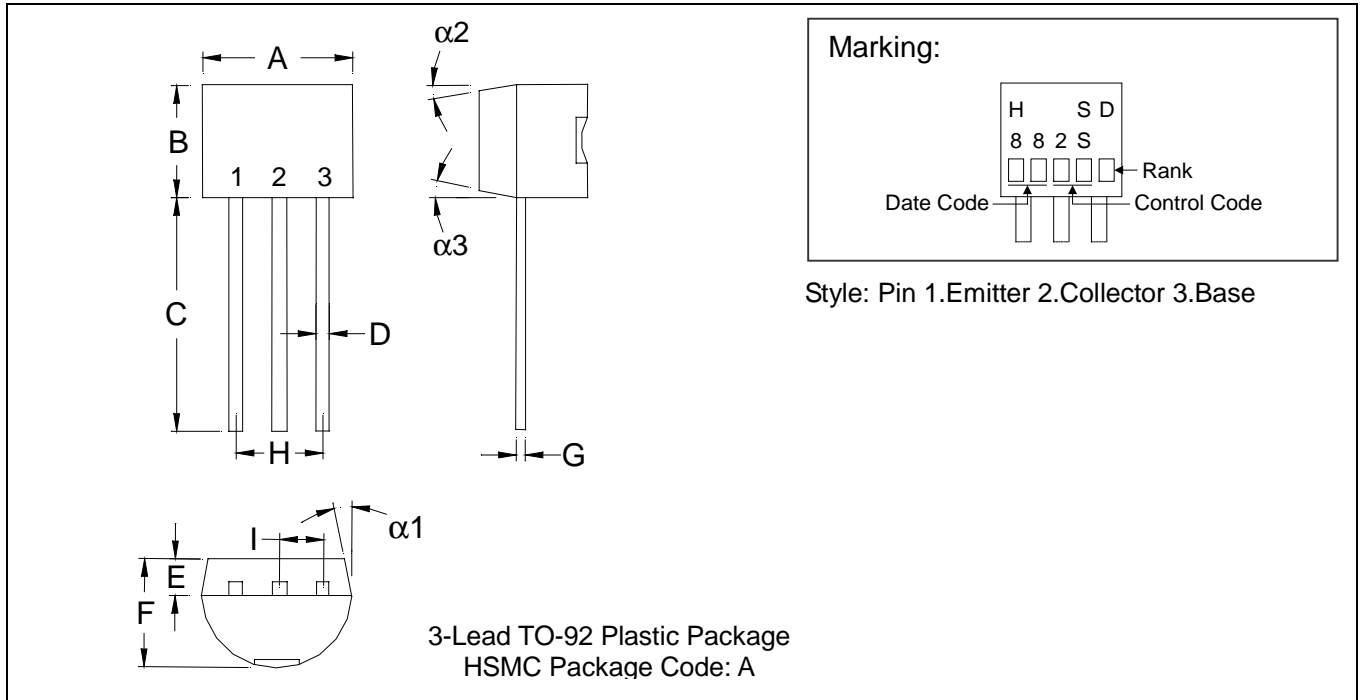
### Characteristics Curve







### 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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