

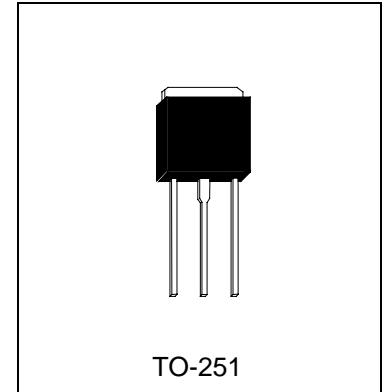


# HI882

NPN EPITAXIAL PLANAR TRANSISTOR

## Description

The HI882 is designed for using in output stage of 10 W audio amplifier, voltage regulator, DC-DC converter and relay driver.



## Absolute Maximum Ratings (Ta=25°C)

- Maximum Temperatures
  - Storage Temperature ..... -55 ~ +150 °C
  - Junction Temperature ..... +150 °C
- Maximum Power Dissipation
  - Total Power Dissipation (Tc=25°C) ..... 10 W
- Maximum Voltages and Currents
  - BVCBO Collector to Base Voltage ..... 40 V
  - BVCEO Collector to Emitter Voltage ..... 30 V
  - BVEBO Emitter to Base Voltage ..... 5 V
  - IC Collector Current (DC) ..... 3 A
  - IC Collector Current (Pulse) ..... 7 A
  - IB Base Current (DC) ..... 600 mA

## 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)	-	0.3	0.5	V	IC=2A, IB=0.2A
*VBE(sat)	-	1	2	V	IC=2A, IB=0.2A
*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

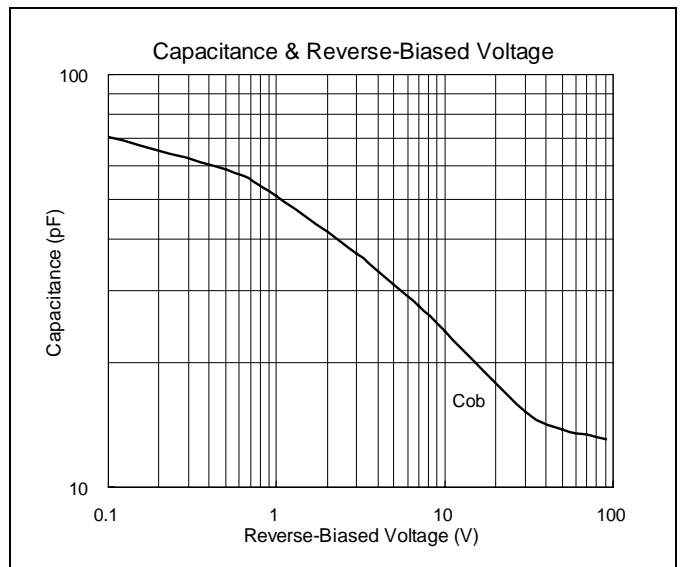
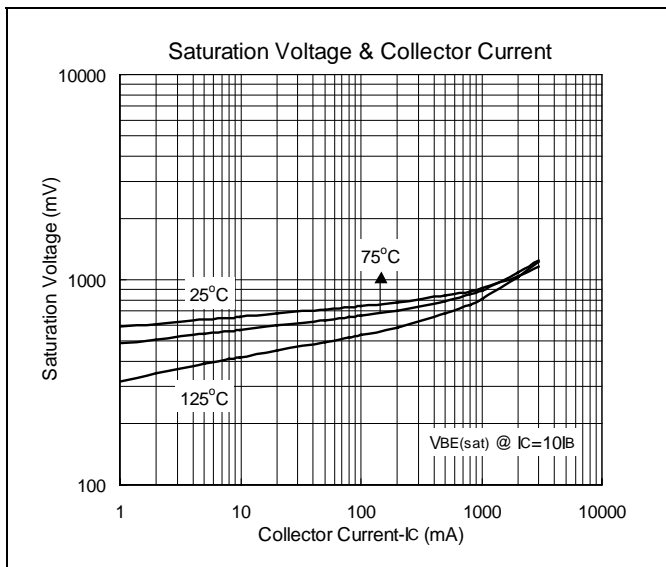
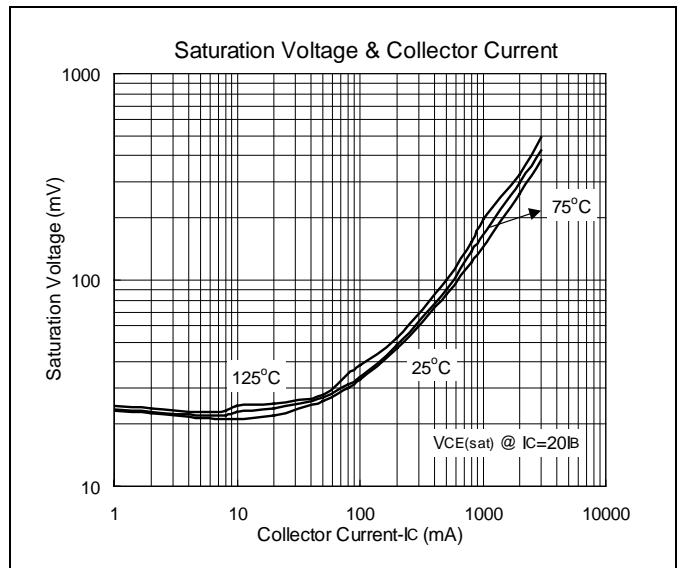
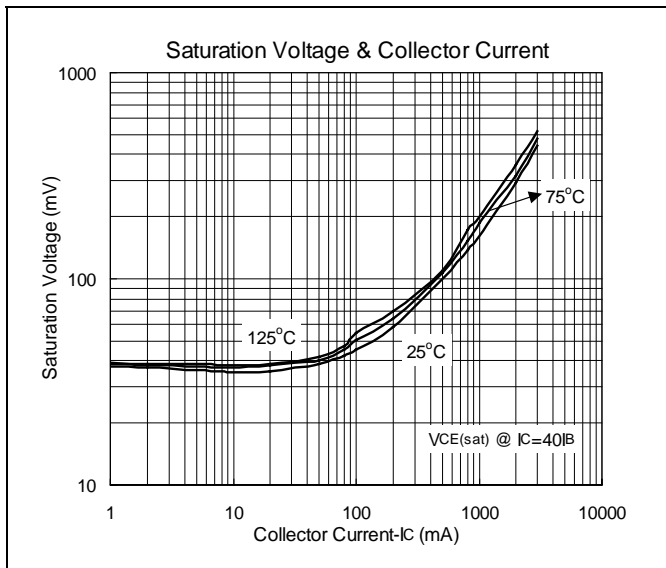
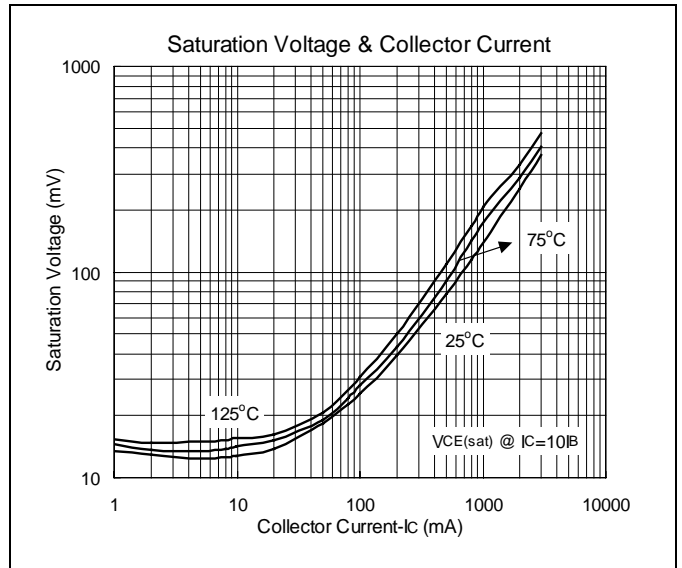
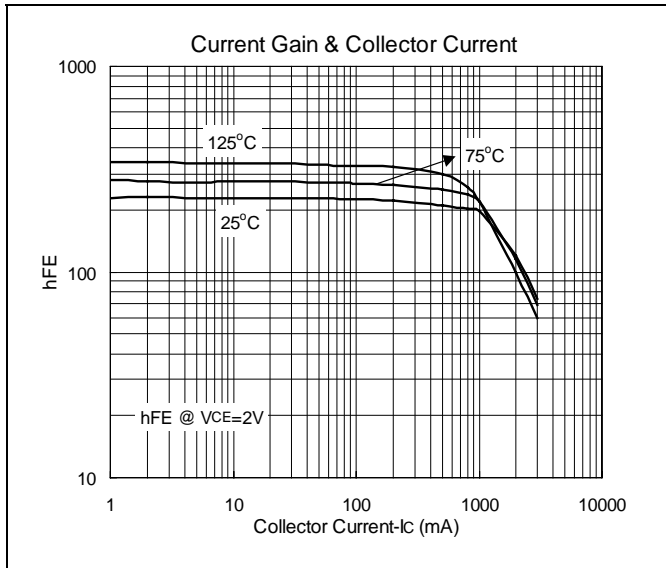
\*Pulse Test: Pulse Width ≤380us, Duty Cycle≤2%

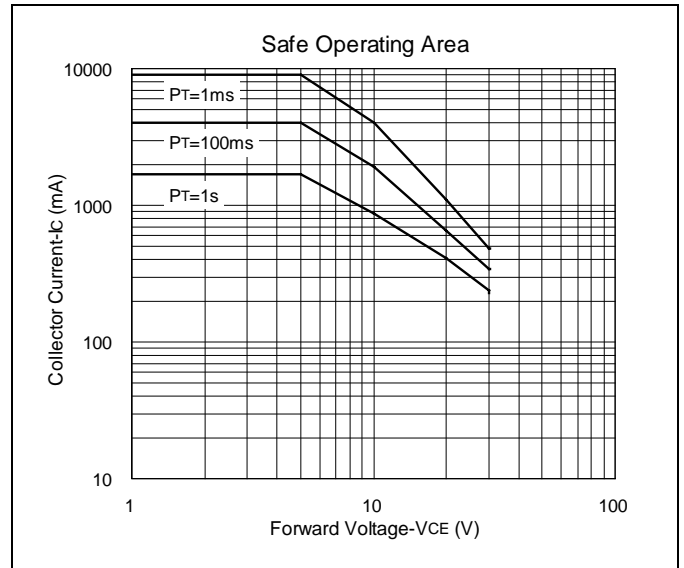
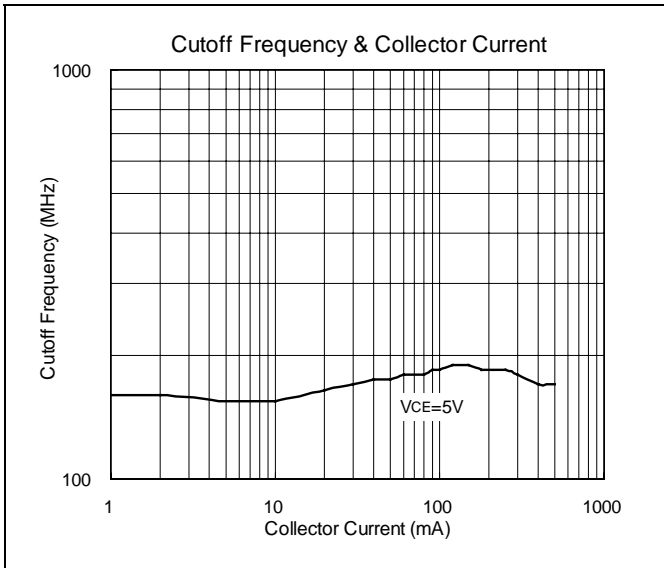
## Classification Of hFE1

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

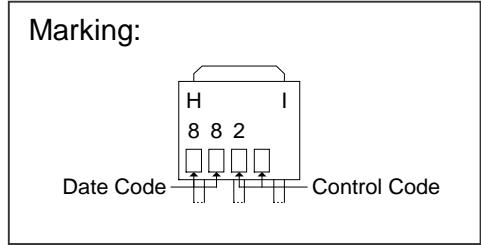
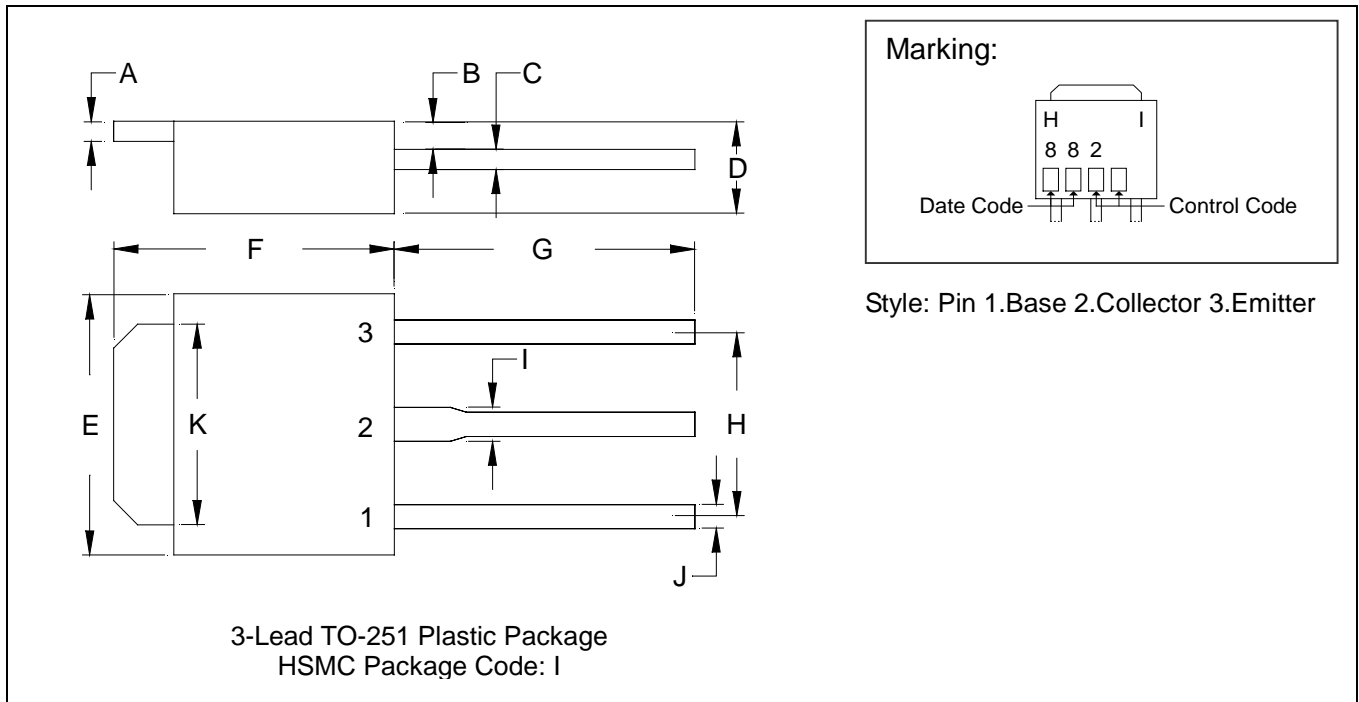


### Characteristics Curve





### TO-251 Dimension



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

\*: Typical

DIM	Inches		Millimeters		DIM	Inches		Millimeters	
	Min.	Max.	Min.	Max.		Min.	Max.	Min.	Max.
A	0.0177	0.0217	0.45	0.55	G	0.2559	-	6.50	-
B	0.0354	0.0591	0.90	1.50	H	-	*0.1811	-	*4.60
C	0.0177	0.0236	0.45	0.60	I	-	0.0354	-	0.90
D	0.0866	0.0945	2.20	2.40	J	-	0.0315	-	0.80
E	0.2520	0.2677	6.40	6.80	K	0.2047	0.2165	5.20	5.50
F	0.2677	0.2835	6.80	7.20					

- Notes: 1.Dimension and tolerance based on our Spec. dated May. 24,1995.  
 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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