

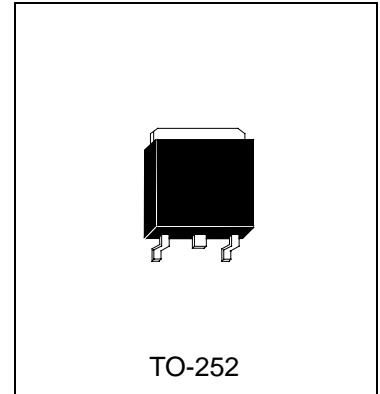


# HJ10387

NPN EPITAXIAL PLANAR TRANSISTOR

## Description

The HJ10387 is designed for general purpose amplifier and low speed switching applications.



## 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) ..... 20 W  
 Total Power Dissipation (Ta=25°C) ..... 2 W
- Maximum Voltages and Currents  
 BVCBO Collector to Base Voltage ..... 80 V  
 BVCEO Collector to Emitter Voltage ..... 80 V  
 BVEBO Emitter to Base Voltage ..... 5 V  
 IC Collector Current ..... 10 A

## Characteristics (Ta=25°C)

Symbol	Min.	Typ.	Max.	Unit	Test Conditions
*BVCEO	80	-	-	V	IC=200mA
ICBO	-	-	100	uA	VCB=160V
IEBO	-	-	2	mA	VEB=5V
ICEO	-	-	1	mA	VCE=80V
ICEV	-	-	300	uA	VCE=80V, VBE(off)=1.5V
*VCE(sat)1	-	-	2	V	IC=5A, IB=10mA
*VCE(sat)2	-	-	3	V	IC=10A, IB=100mA
*VCE(sat)3	-	-	1.5	V	IC=5A, IB=2.5mA
*VBE(sat)	-	-	2	V	IC=5A, IB=5mA
*VBE(on)1	-	-	2.8	V	VCE=3V, IC=5A
*VBE(on)2	-	-	4.5	V	VCE=3V, IC=10A
VFEC	-	-	3	V	IC=5A
*hFE1	2	-	20	K	VCE=3V, IC=5A
*hFE2	100	-	-		VCE=3V, IC=10A

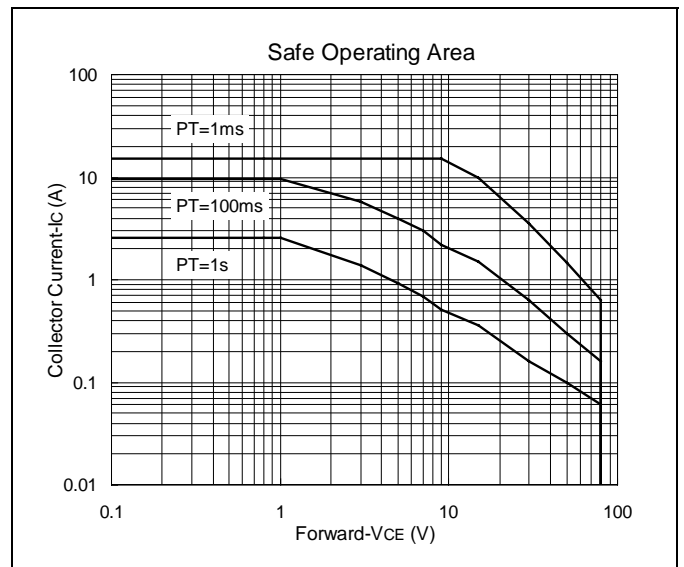
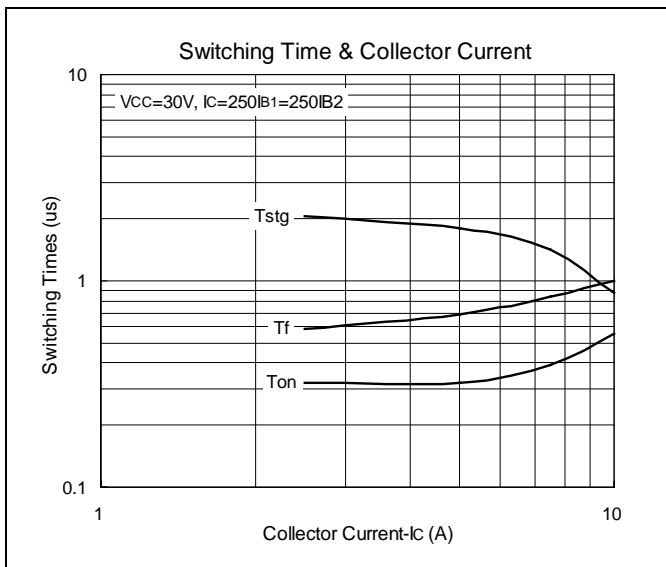
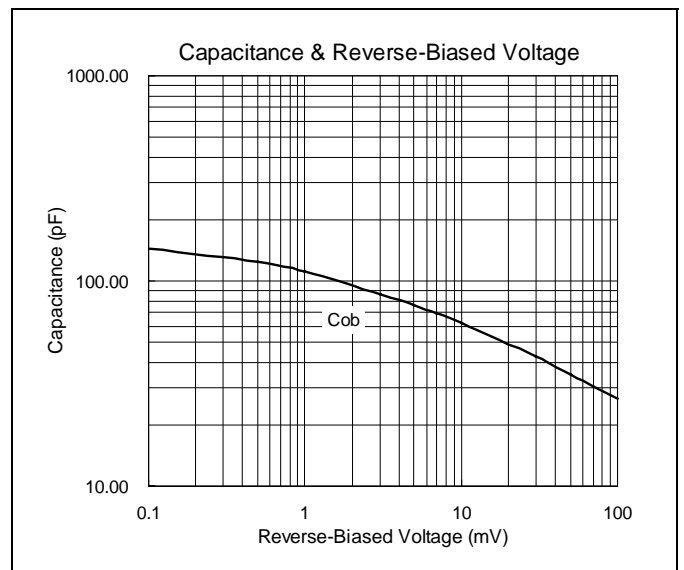
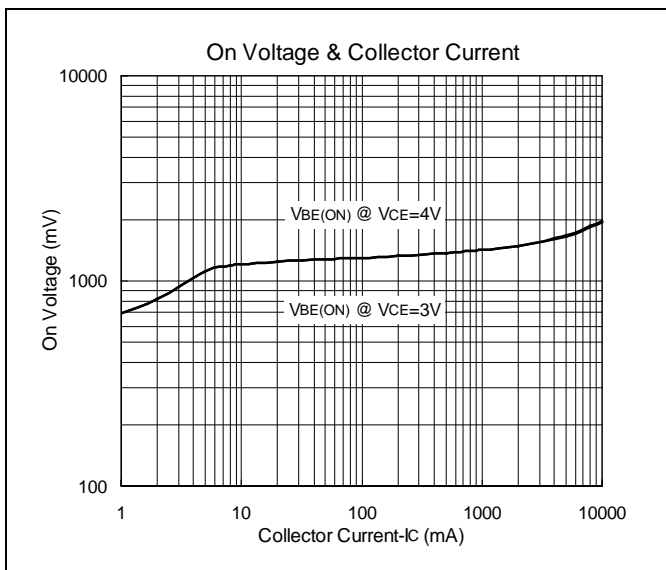
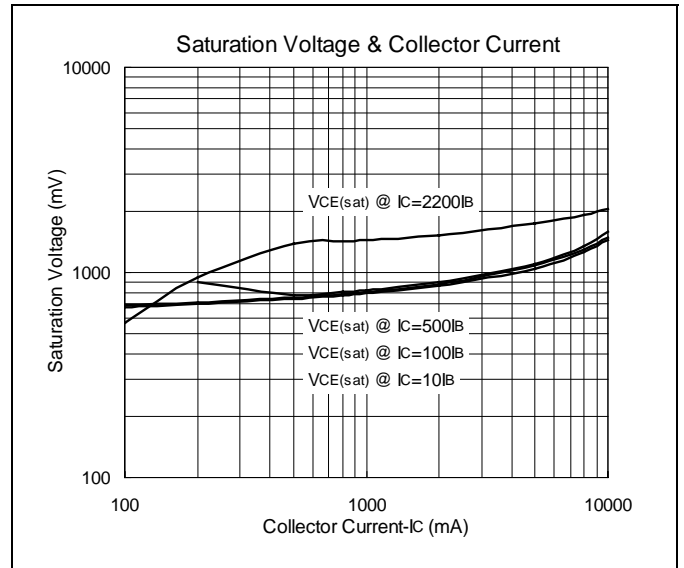
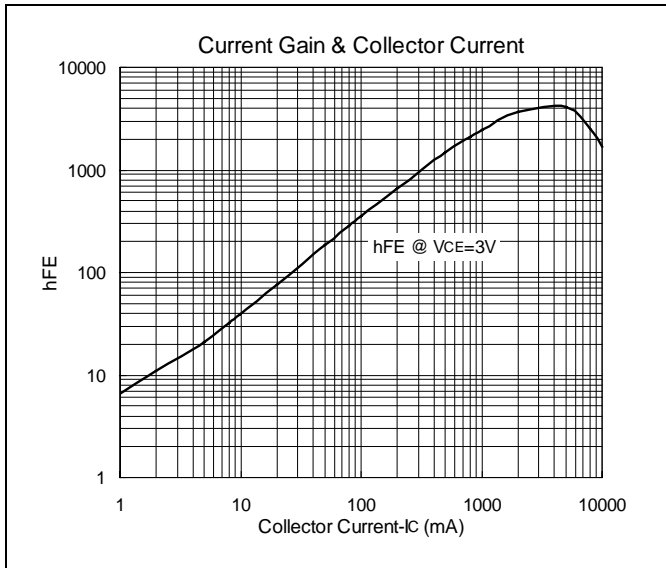
\*Pulse Test : Pulse Width ≤380us, Duty Cycle≤2%

## Classification Of VCE(sat)1

Rank	KA	KB	KC	Normal
VCE(sat)1	<1.5V	<1.1V	<1.3V	<2V

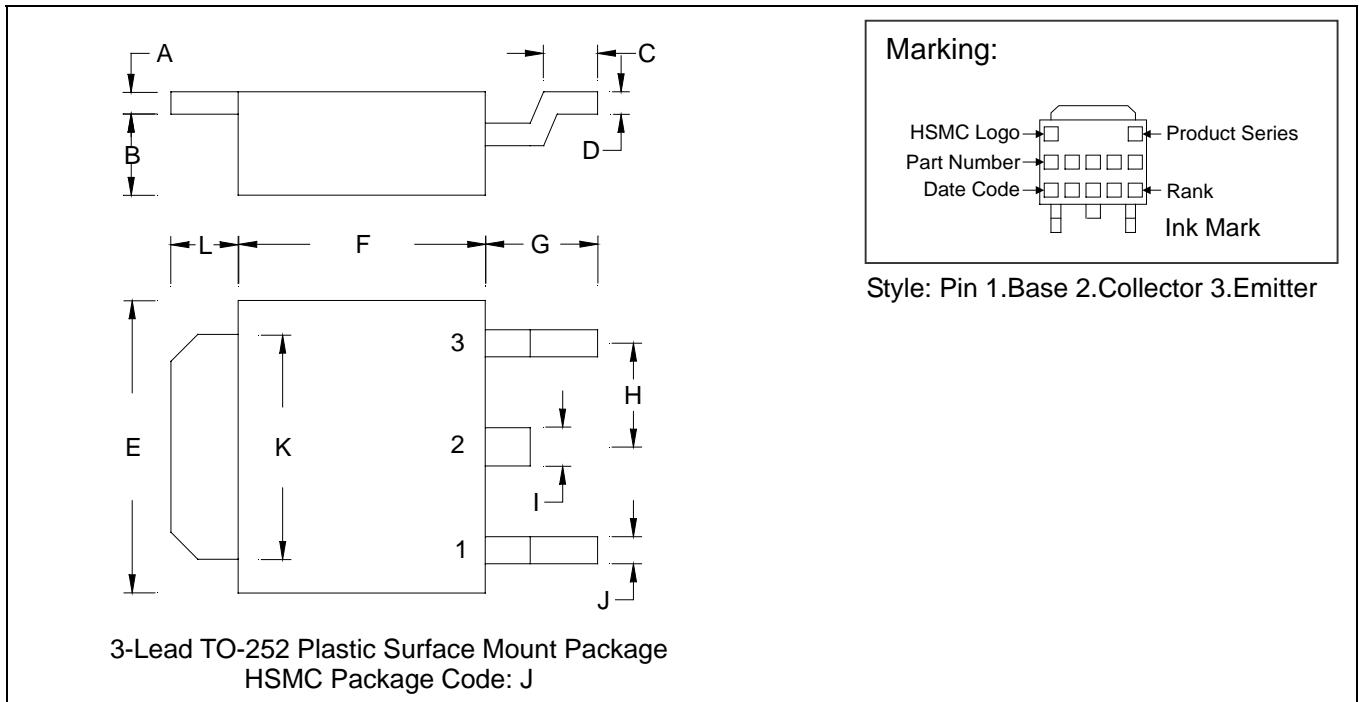


### Characteristics Curve





## TO-252 Dimension



\*: 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	0.0866	0.1102	2.20	2.80
B	0.0650	0.0768	1.65	1.95	H	-	*0.0906	-	*2.30
C	0.0354	0.0591	0.90	1.50	I	-	0.0354	-	0.90
D	0.0177	0.0236	0.45	0.60	J	-	0.0315	-	0.80
E	0.2520	0.2677	6.40	6.80	K	0.2047	0.2165	5.20	5.50
F	0.2125	0.2283	5.40	5.80	L	0.0551	0.0630	1.40	1.60

- Notes: 1.Dimension and tolerance based on our Spec. dated May. 05,1996.  
 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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