

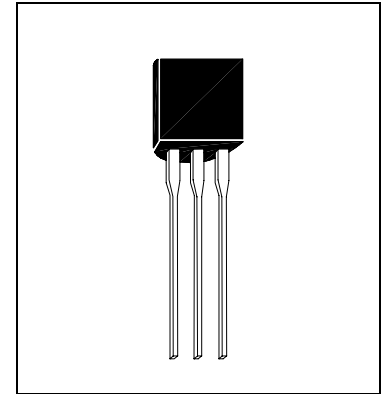


# H2N5089

NPN EPITAXIAL PLANAR TRANSISTOR

## Description

Amplifier Transistor.



## Absolute Maximum Ratings

- Maximum Temperatures  
Storage Temperature ..... -55 ~ +150 °C  
Junction Temperature ..... +150 °C Maximum
- Maximum Power Dissipation  
Total Power Dissipation (Ta=25°C) ..... 350 mW
- Maximum Voltages and Currents (Ta=25°C)  
VCBO Collector to Base Voltage ..... 30 V  
VCEO Collector to Emitter Voltage ..... 25 V  
VEBO Emitter to Base Voltage ..... 4.5 V  
IC Collector Current ..... 50 mA

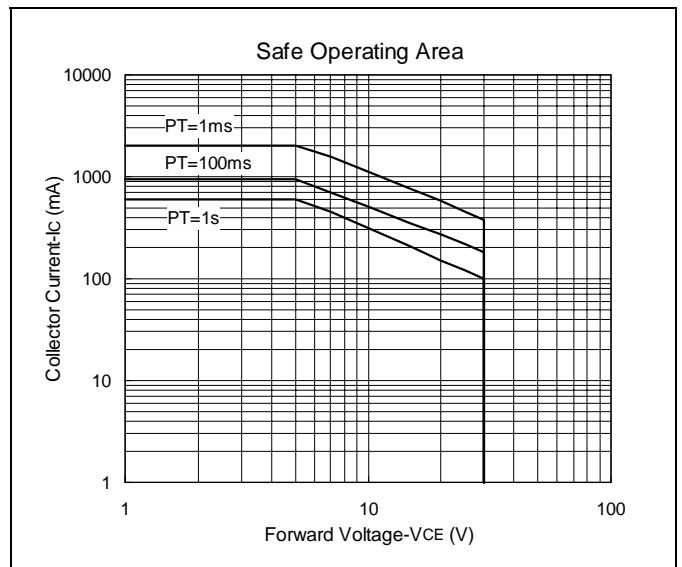
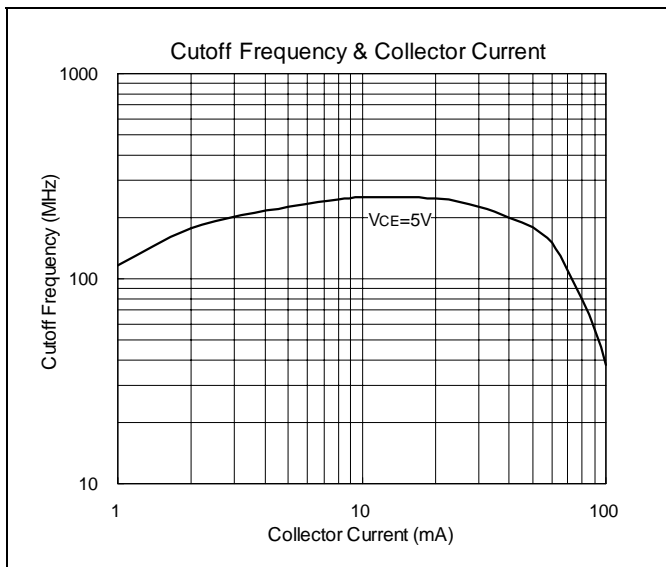
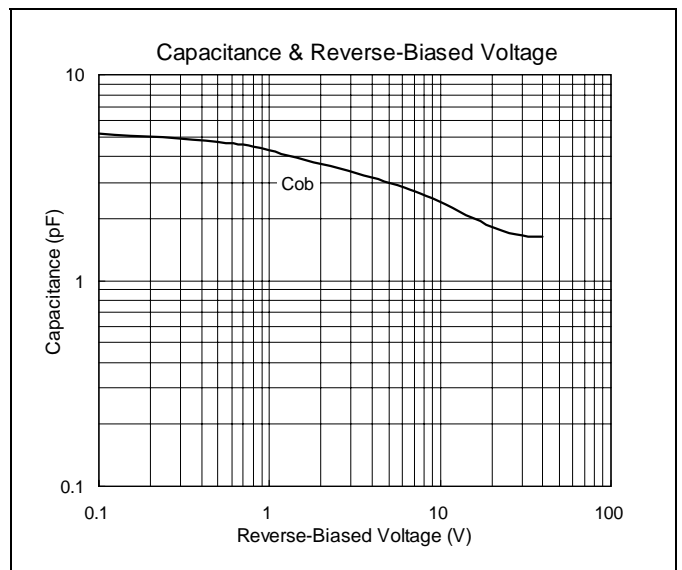
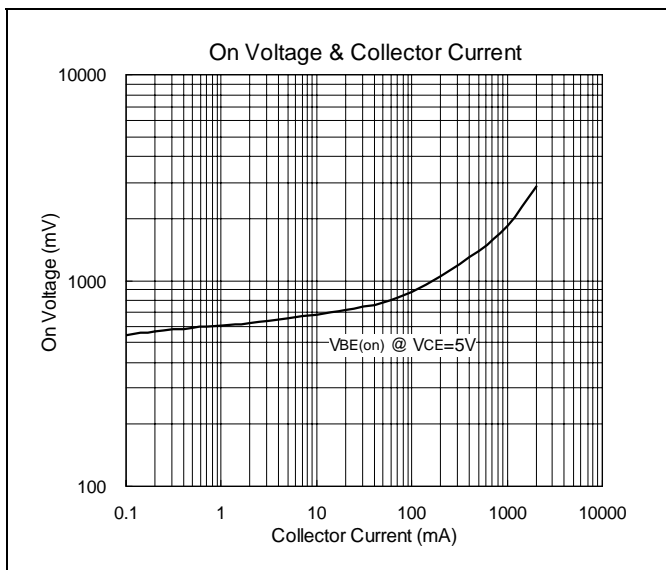
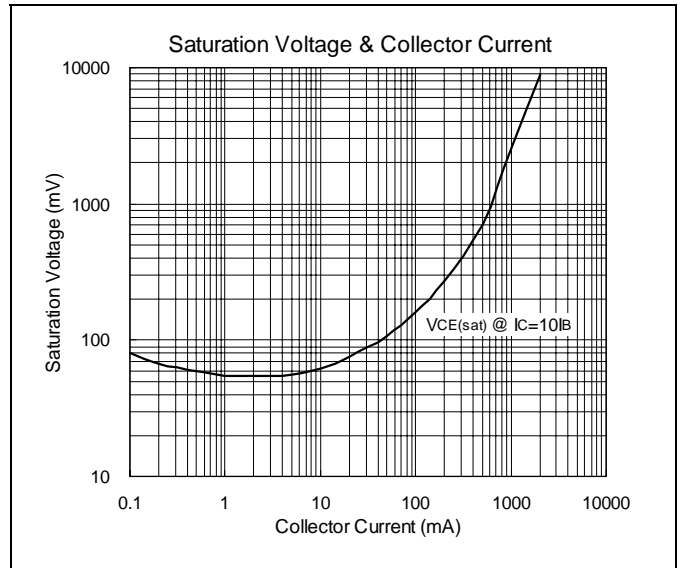
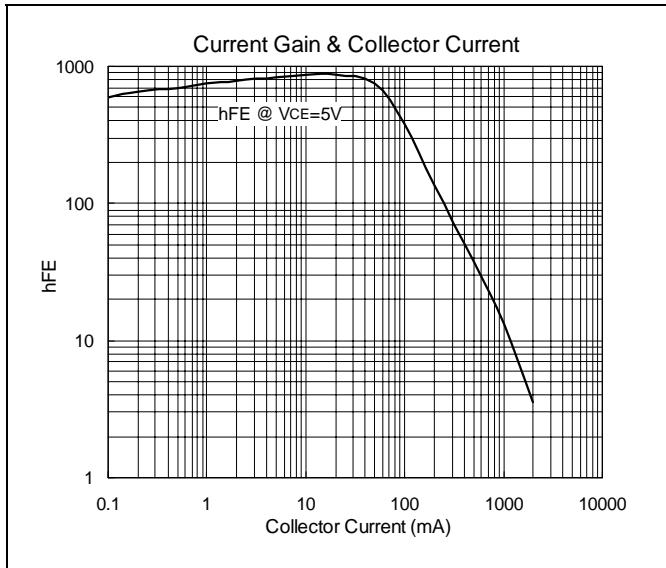
## Characteristics (Ta=25°C)

Symbol	Min.	Typ.	Max.	Unit	Test Conditions
BVCBO	30	-	-	V	IC=100uA, IE=0
BVCEO	25	-	-	V	IC=1mA, IB=0
BVEBO	4.5	-	-	V	IE=10uA, IC=0
ICBO	-	-	50	nA	VCB=15V, IE=0
IEBO	-	-	100	nA	VEB=4.5V, IC=0
*VCE(sat)	-	-	0.5	V	IC=10mA, IB=1mA
VBE(on)	-	-	0.8	V	IC=10mA, IB=5V
*hFE1	400	-	1200		VCE=5V, IC=0.1mA
*hFE2	450	-	-		VCE=5V, IC=1mA
*hFE3	400	-	-		VCE=5V, IC=10mA
fT	50	-	-	MHz	VCE=5V, IC=0.5mA, f=20MHz
Cob	-	-	4.0	pF	VCB=5V, f=1MHz, IE=0

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

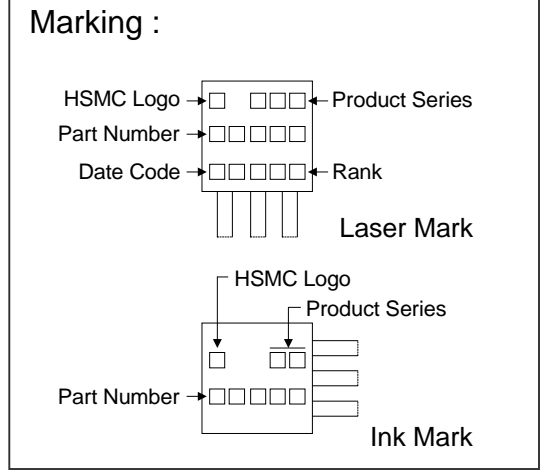
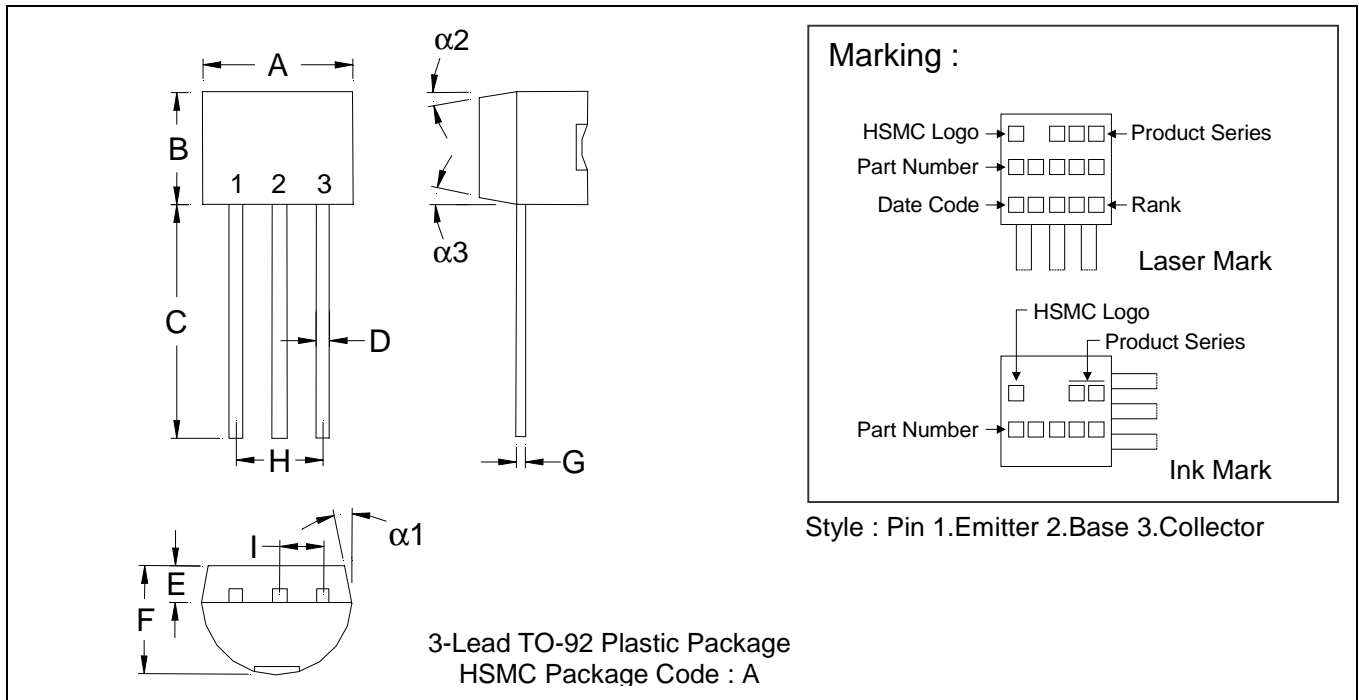


### Characteristics Curve





## TO-92 Dimension



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

\*: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	α1	-	*5°	-	*5°
E	-	*0.0500	-	*1.27	α2	-	*2°	-	*2°
F	0.1323	0.1480	3.36	3.76	α3	-	*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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