



# H2N6517

NPN EPITAXIAL PLANAR TRANSISTOR

## Description

The H2N6517 is designed for general purpose applications requiring high breakdown voltages.

## Features

- High Collector-Emitter Breakdown Voltage
- Low Collector-Emitter Saturation Voltage
- The H2N6517 is complementary to H2N6520



## Absolute Maximum Ratings

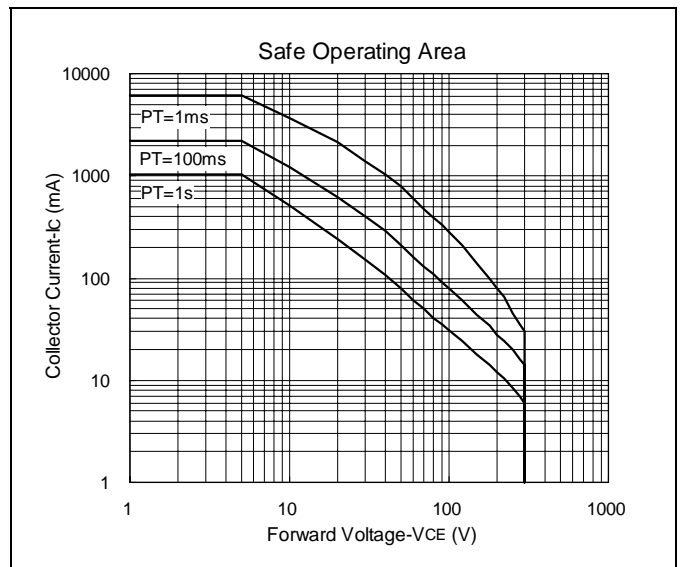
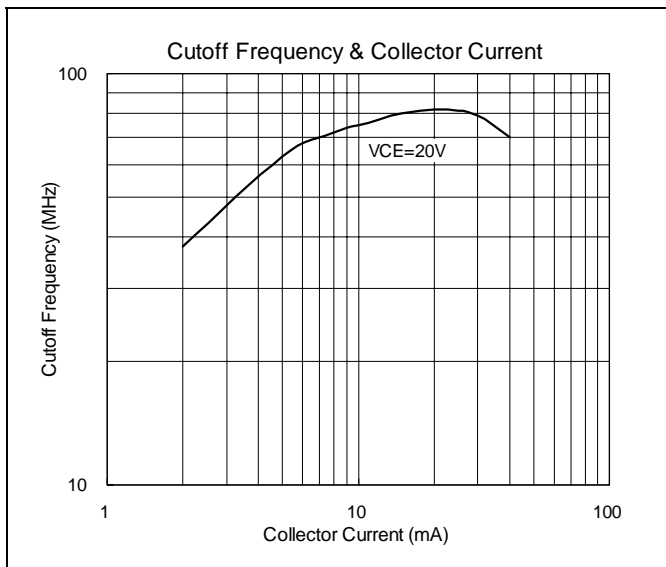
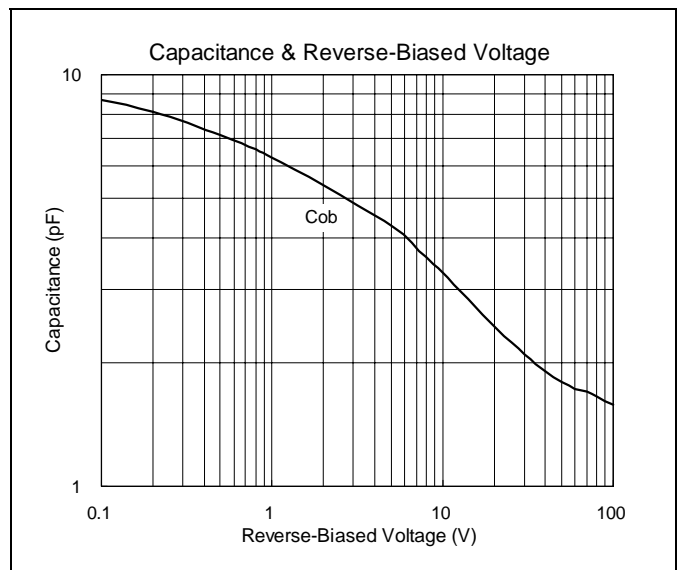
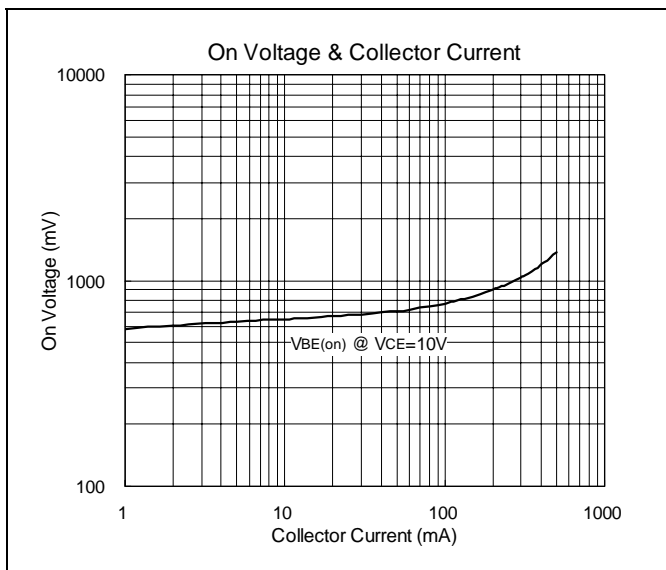
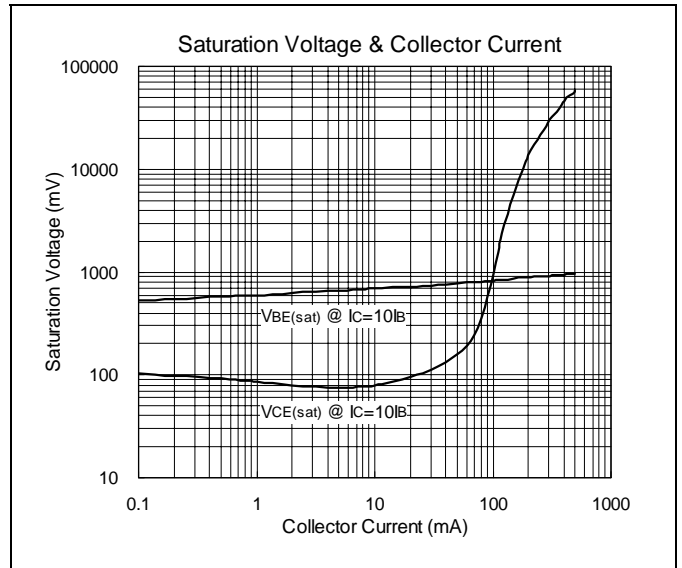
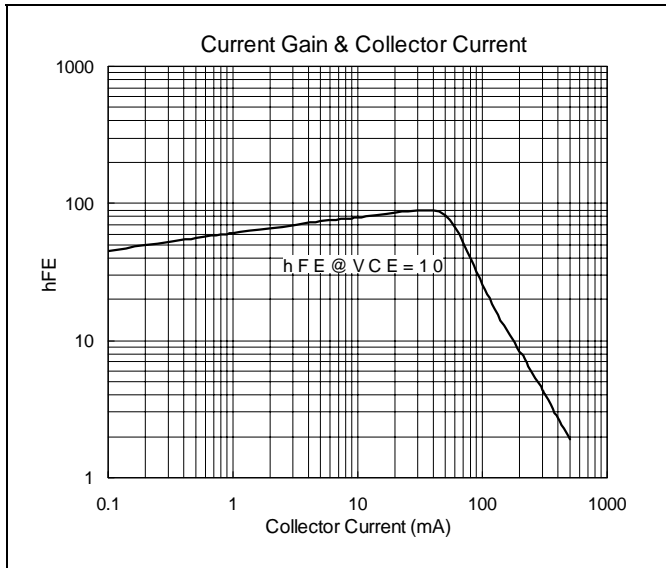
- Maximum Temperatures
  - Storage Temperature ..... -55 ~ +150 °C
  - Junction Temperature ..... +150 °C Maximum
- Maximum Power Dissipation
  - Total Power Dissipation (Ta=25°C)..... 625 mW
- Maximum Voltages and Currents (Ta=25°C)
  - VCBO Collector to Base Voltage ..... 350 V
  - VCEO Collector to Emitter Voltage..... 350 V
  - VEBO Emitter to Base Voltage ..... 5 V
  - IC Collector Current ..... 500 mA
  - IB Base Current ..... 250 mA

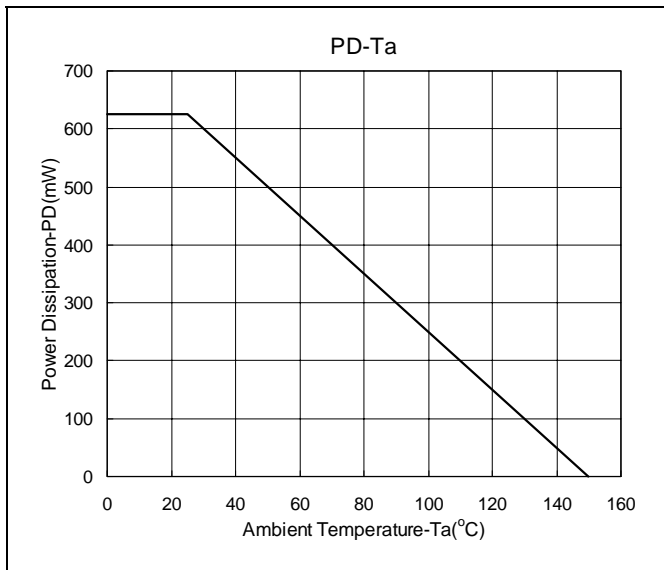
## Characteristics (Ta=25°C, \*Pulse Test : Pulse Width ≤380us, Duty Cycle≤2%)

Symbol	Min.	Typ.	Max.	Unit	Test Conditions
BVCBO	350	-	-	V	IC=100uA, IE=0
BVCEO	350	-	-	V	IC=1mA, IB=0
BVEBO	5	-	-	V	IE=10uA, IC=0
ICBO	-	-	50	nA	VCB=250V, IE=0
IEBO	-	-	50	nA	VEB=5V, IC=0
*VCE(sat)1	-	-	0.30	V	IC=10mA, IB=1mA
*VCE(sat)2	-	-	0.35	V	IC=20mA, IB=2mA
*VCE(sat)3	-	-	0.50	V	IC=30mA, IB=3mA
*VCE(sat)4	-	-	1	V	IC=50mA, IB=5mA
VBE(on)	-	-	2	V	IC=100mA, VCE=10V
*VBE(sat)1	-	-	0.75	V	IC=10mA, IB=1mA
*VBE(sat)2	-	-	0.85	V	IC=20mA, IB=2mA
*VBE(sat)3	-	-	0.90	V	IC=30mA, IB=3mA
*hFE1	20	-	-		VCE=10V, IC=1mA
*hFE2	30	-	-		VCE=10V, IC=10m
*hFE3	30	-	200		VCE=10V, IC=30mA
*hFE4	20	-	200		VCE=10V, IC=50mA
*hFE5	15	-	-		VCE=10V, IC=100mA
fT	40	-	200	MHz	IC=10mA, VCE=20V, f=20MHz
Cob	-	-	6	pF	VCB=20V, f=1MHz, IE=0



### Characteristics Curve







### TO-92 Dimension

3-Lead TO-92 Plastic Package  
HSMC Package Code : A

**Marking :**

HSMC Logo → □ □ □ □ ← Product Series  
 Part Number → □ □ □ □ □ □  
 Date Code → □ □ □ □ □ □ ← Rank  
 Laser Mark

HSMC Logo  
 Product Series  
 Part Number → □ □ □ □ □ □  
 Ink Mark

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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**Head Office And Factory :**

- **Head Office** (Hi-Sincerity Microelectronics Corp.) : 10F.,No. 61, Sec. 2, Chung-Shan N. Rd. Taipei Taiwan R.O.C.  
 Tel : 886-2-25212056 Fax : 886-2-25632712, 25368454
- **Factory 1** : No. 38, Kuang Fu S. Rd., Fu-Kou Hsin-Chu Industrial Park Hsin-Chu Taiwan. R.O.C  
 Tel : 886-3-5983621~5 Fax : 886-3-5982931
- **Factory 2** : No. 17-1, Ta-Tung Rd., Fu-Kou Hsin-Chu Industrial Park Hsin-Chu Taiwan. R.O.C  
 Tel : 886-3-5977061 Fax : 886-3-5979220