



# HMPS8099

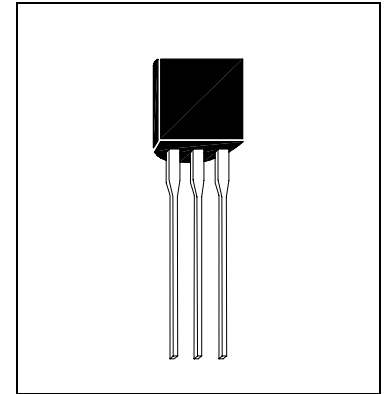
NPN SILICON TRANSISTOR

## Description

HMPS8099 is designed for general purpose amplifier applications.

## Features

- Low Collector-Emitter Saturation Voltage
- HMPS8099 is complementary to HMPS8599



## Absolute Maximum Ratings

- Maximum Temperatures  
 Storage Temperature ..... -55 ~ +125 °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 ..... 80 V  
 VCES Collector to Emitter Voltage..... 80 V  
 VEBO Emitter to Base Voltage ..... 6 V  
 IC Collector Current ..... 500 mA

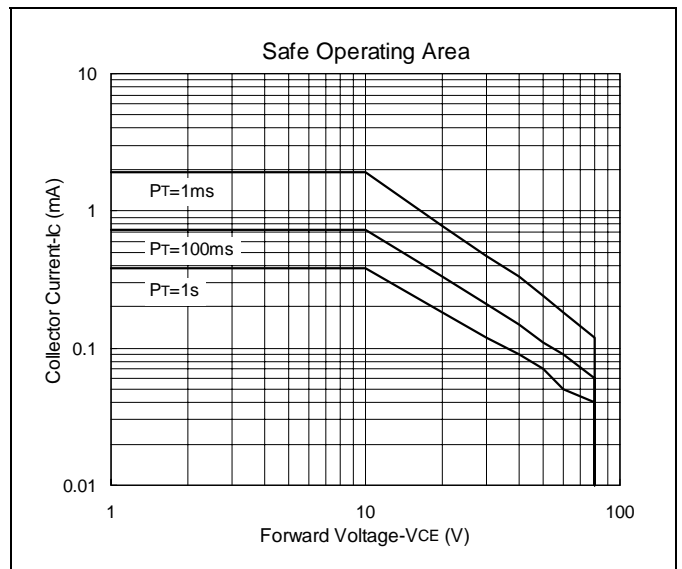
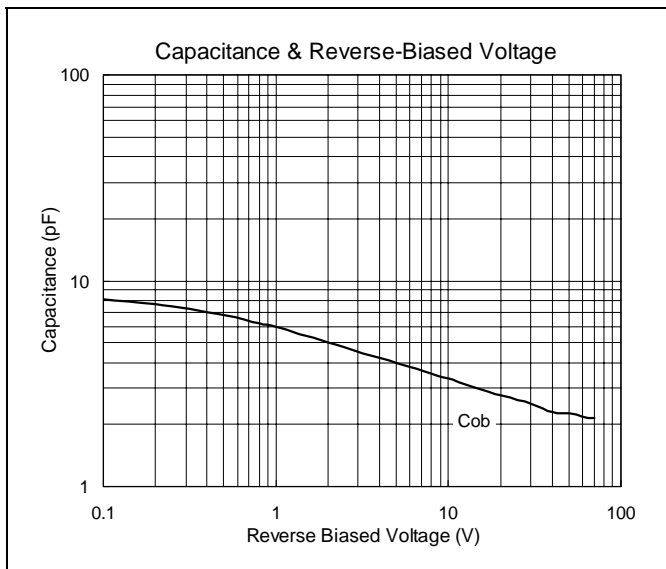
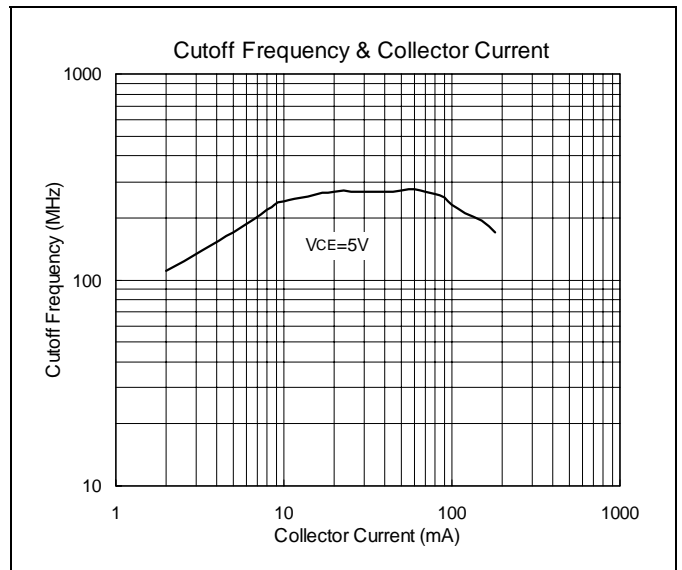
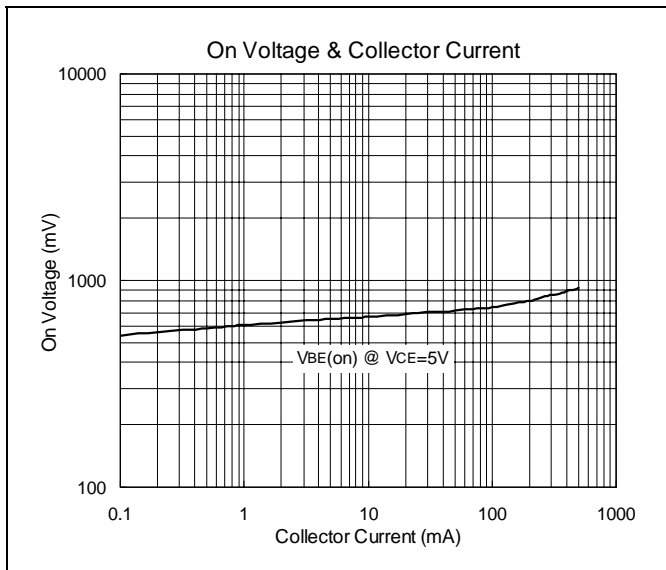
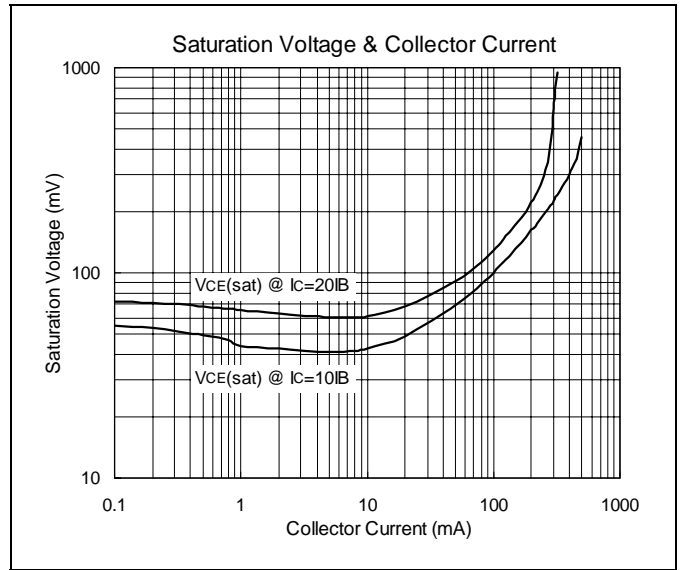
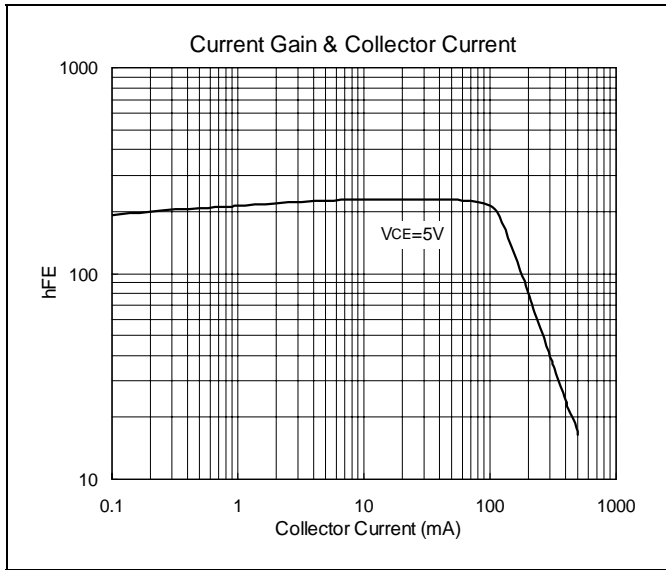
## Characteristics (Ta=25°C)

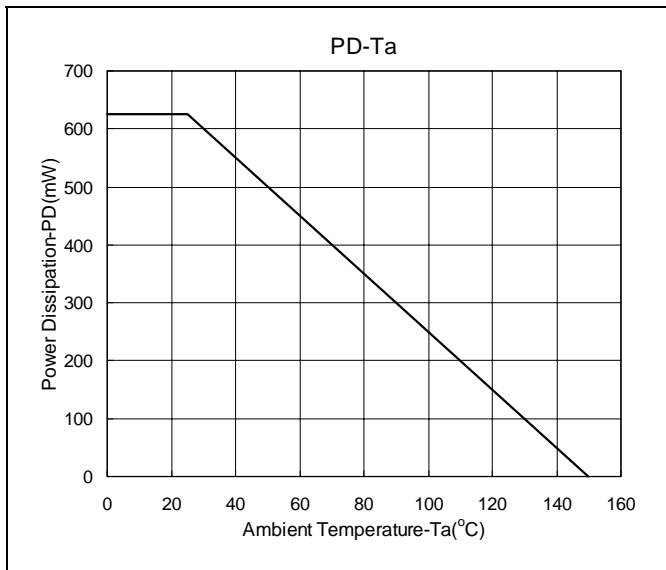
Symbol	Min.	Typ.	Max.	Unit	Test Conditions
BVCBO	80	-	-	V	IC=100uA, IE=0
BVCEO	80	-	-	V	IC=10mA, IB=0
BVEBO	6	-	-	V	IE=10uA, IC=0
ICBO	-	-	100	nA	VCB=80V, IE=0
IEBO	-	-	100	nA	VEB=4V, IC=0
ICEO	-	-	100	nA	VCE=60V, IB=0
*hFE1	100	-	300		IC=1mA, VCE=5V
*hFE2	100	-	-		IC=10mA, VCE=5V
*hFE3	75	-	-		IC=100mA, VCE=5V
*VCE(sat)1	-	-	0.4	V	IC=100mA, IB=5mA
*VCE(sat)2	-	-	0.3	V	IC=100mA, IB=10mA
VBE(on)	0.6	-	0.8	V	IC=10mA, VCE=5V

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



### 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