



HMBT5089

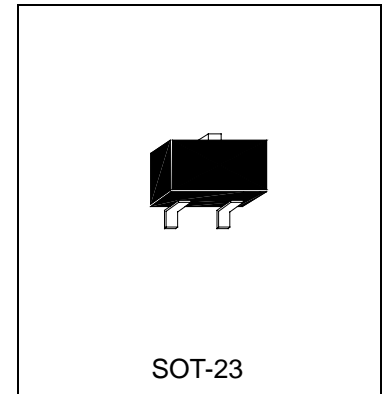
NPN EPITAXIAL PLANAR TRANSISTOR

Description

The HMBT5089 is designed for low noise, high gain, general purpose amplifier applications.

Absolute Maximum Ratings

- Maximum Temperatures
Storage Temperature -55 ~ +150 °C
Junction Temperature..... +150 °C Maximum
- Maximum Power Dissipation
Total Power Dissipation (Ta=25°C) 225 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



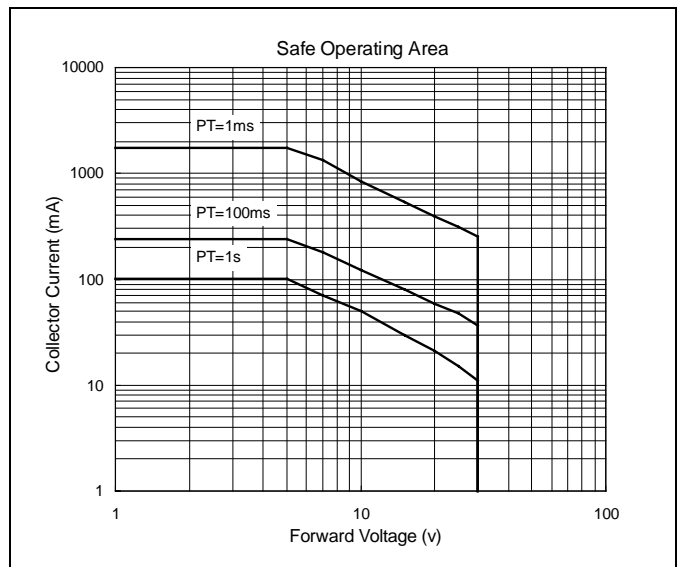
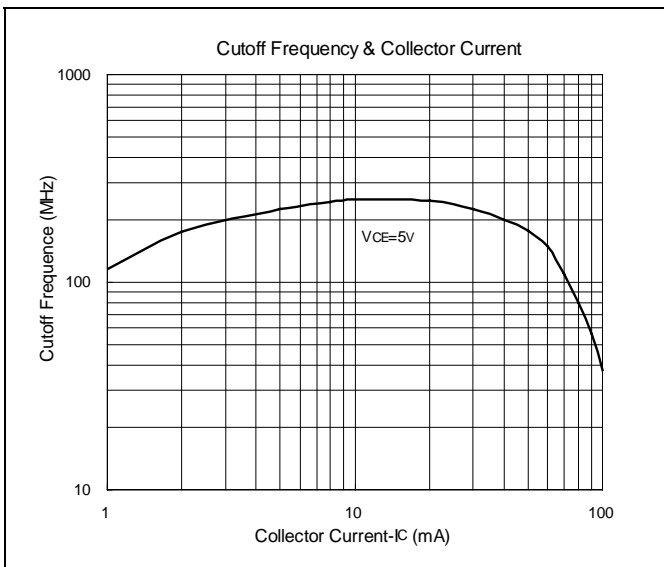
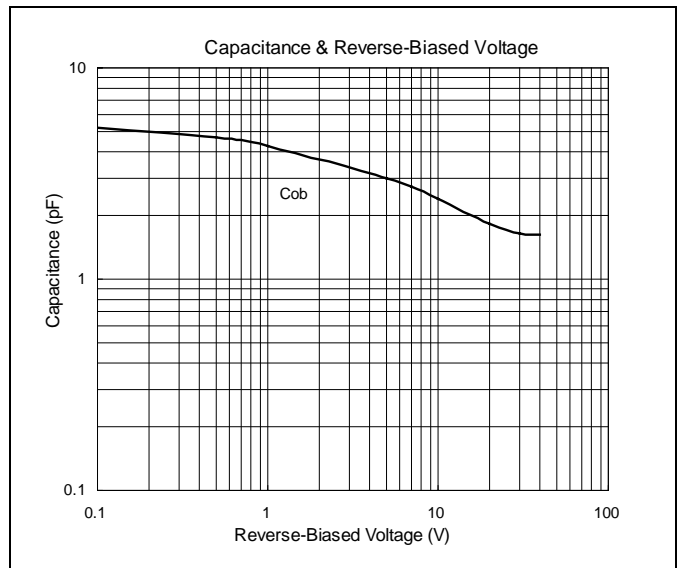
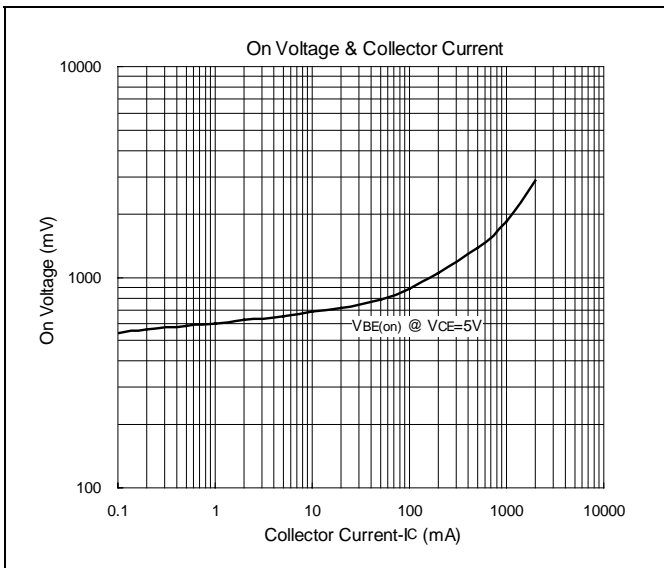
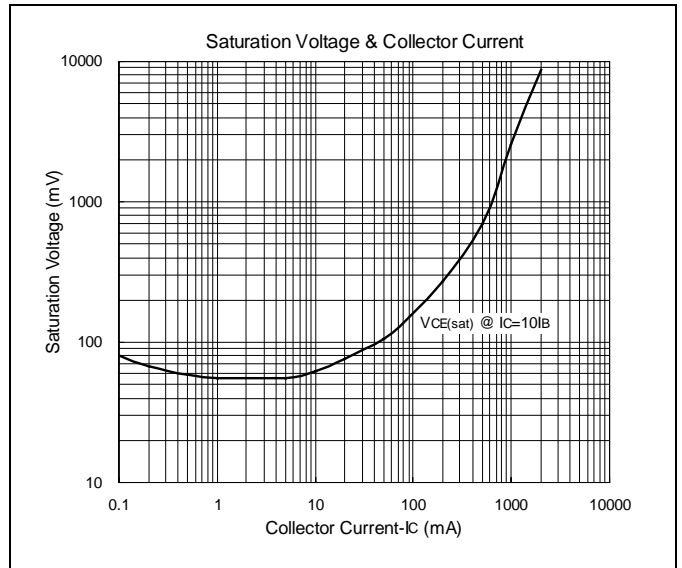
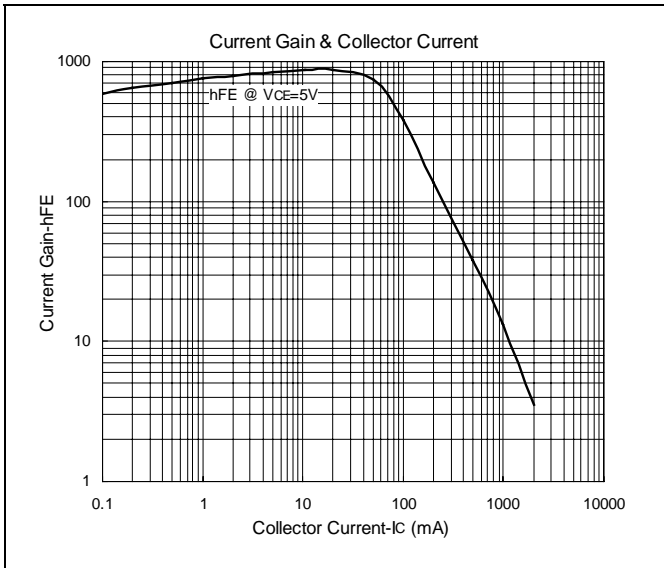
Characteristics (Ta=25°C)

Symbol	Min.	Typ.	Max.	Unit	Test Conditions
BVCBO	30	-	-	V	IC=100uA
BVCEO	25	-	-	V	IC=1mA
BVEBO	4.5	-	-	V	IE=10uA
ICBO	-	-	50	nA	VCB=15V
IEBO	-	-	100	nA	VEB=4.5V
*VCE(sat)	-	-	500	mV	IC=10mA, IB=1mA
*VBE(sat)	-	-	800	mV	IC=10mA, IB=1mA
*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

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

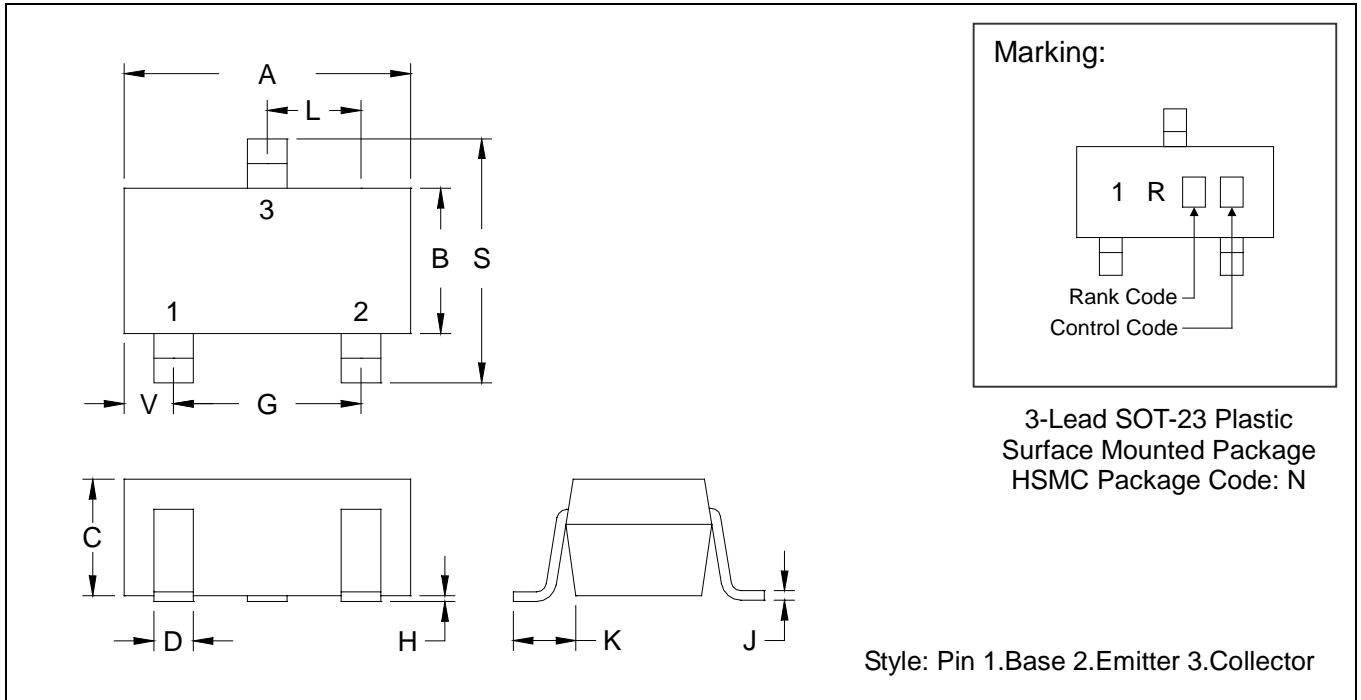


Characteristics Curve





SOT-23 Dimension



*: Typical

DIM	Inches		Millimeters		DIM	Inches		Millimeters	
	Min.	Max.	Min.	Max.		Min.	Max.	Min.	Max.
A	0.1102	0.1204	2.80	3.04	J	0.0034	0.0070	0.085	0.177
B	0.0472	0.0630	1.20	1.60	K	0.0128	0.0266	0.32	0.67
C	0.0335	0.0512	0.89	1.30	L	0.0335	0.0453	0.85	1.15
D	0.0118	0.0197	0.30	0.50	S	0.0830	0.1083	2.10	2.75
G	0.0669	0.0910	1.70	2.30	V	0.0098	0.0256	0.25	0.65
H	0.0005	0.0040	0.013	0.10					

- Notes: 1.Dimension and tolerance based on our Spec. dated Sep. 07,1997.
 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

Important Notice:

- All rights are reserved. Reproduction in whole or in part is prohibited without the prior written approval of HSMC.
- HSMC reserves the right to make changes to its products without notice.
- **HSMC semiconductor products are not warranted to be suitable for use in Life-Support Applications, or systems.**
- HSMC assumes no liability for any consequence of customer product design, infringement of patents, or application assistance.

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



LittleDiode supplies new, hard to find or obsolete electronic components and semiconductors all over the world.

With over two million different components listed you are sure to find the part you need.

Feel free to visit us today at our online store:

LittleDiode.com

Looking forward to providing you with the best possible service.