

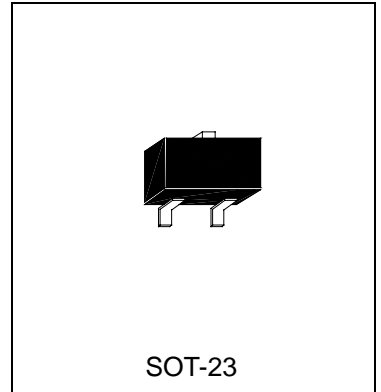


HMBT5086

PNP EPITAXIAL PLANAR TRANSISTOR

Description

The HMBT5086 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 -50 V
VCEO Collector to Emitter Voltage -50 V
VEBO Emitter to Base Voltage -3 V
IC Collector Current -50 mA

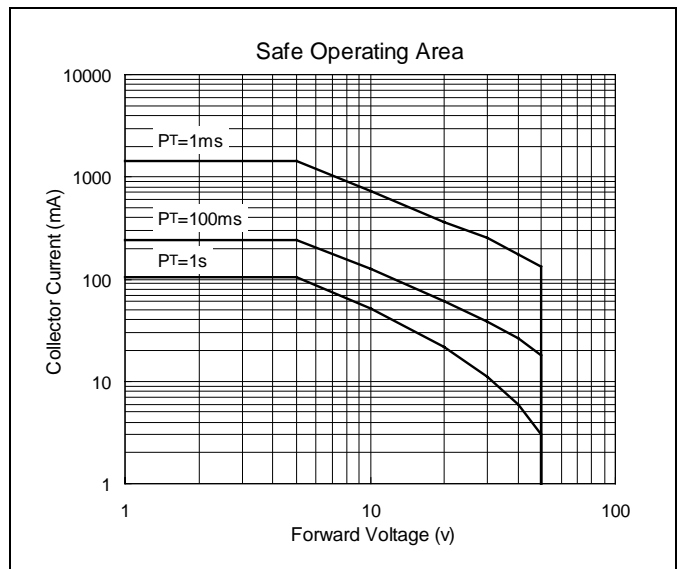
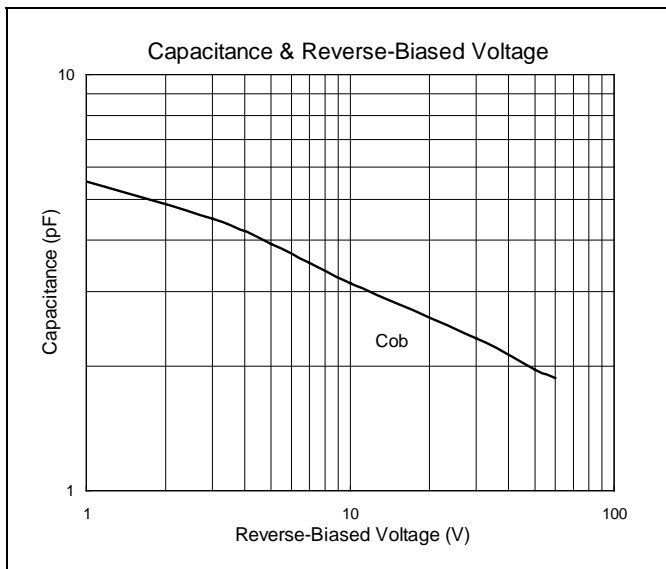
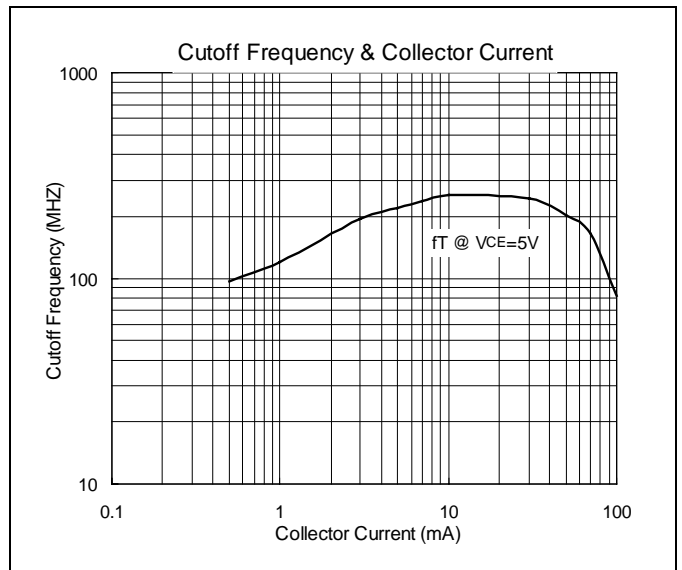
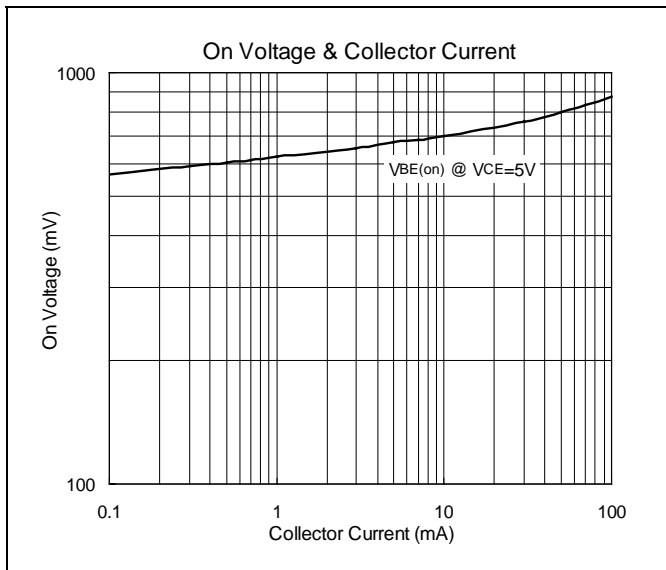
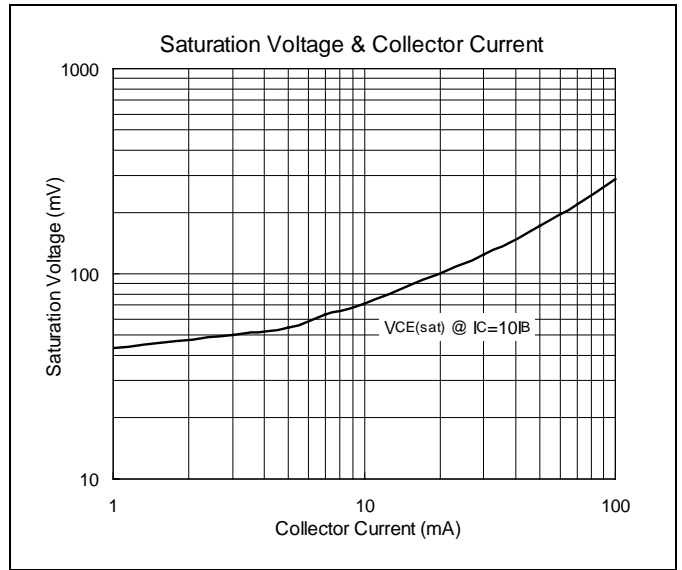
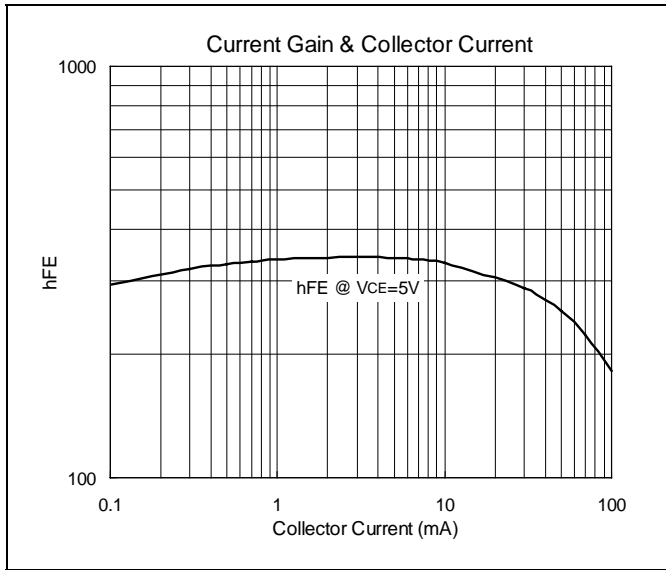
Characteristics (Ta=25°C)

Symbol	Min.	Typ.	Max.	Unit	Test Conditions
BVCBO	-50	-	-	V	IC=-100uA
BVCEO	-50	-	-	V	IC=-1mA
BVEBO	-3	-	-	V	IE=-10uA
ICBO1	-	-	-10	nA	VCB=-10V
ICBO2	-	-	-50	nA	VCB=-35V
*VCE(sat)	-	-	-300	mV	IC=-10mA, IB=-1mA
*VBE(sat)	-	-	-850	mV	IC=-10mA, IB=-1mA
*hFE1	150	-	500		VCE=-5V, IC=-0.1mA
*hFE2	150	-	-		VCE=-5V, IC=-1mA
*hFE3	150	-	-		VCE=-5V, IC=-10mA
fT	40	-	-	MHz	VCE=-5V, IC=-0.5mA, f=100MHz
Cob	-	-	4.0	pF	VCB=-5V, f=100KHz

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

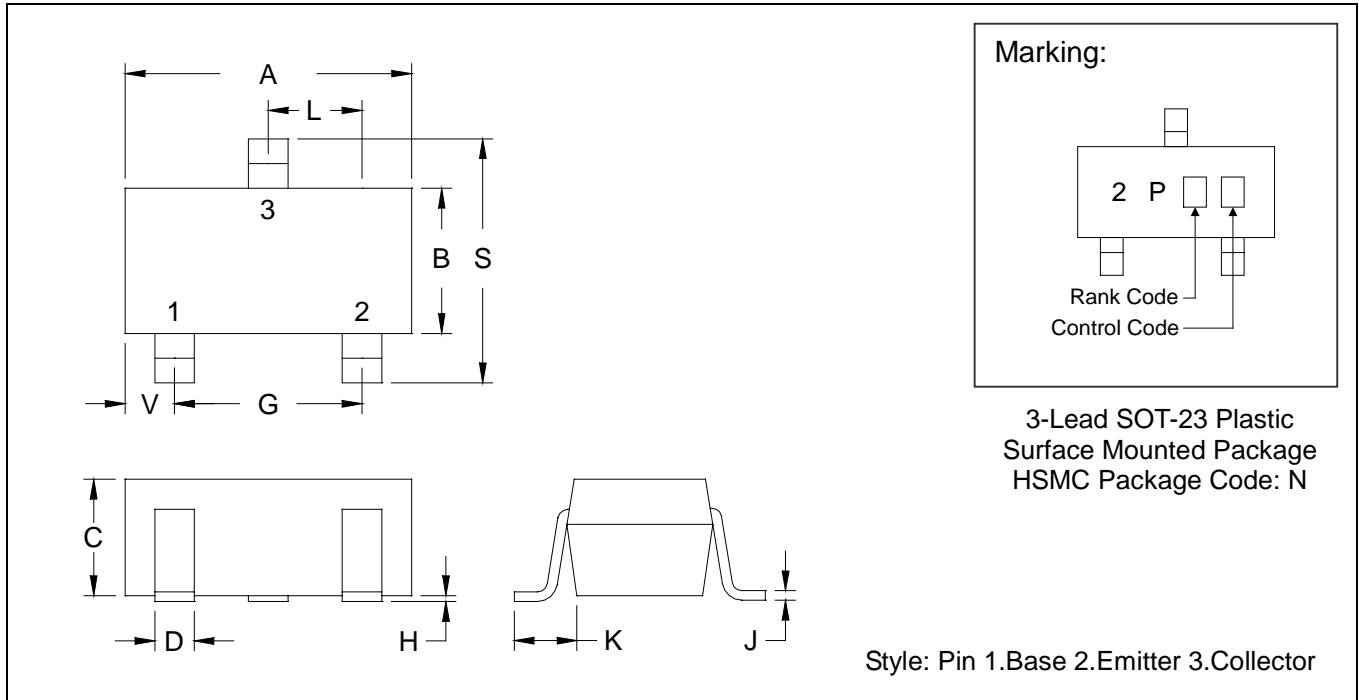


Characteristics Curve





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

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