

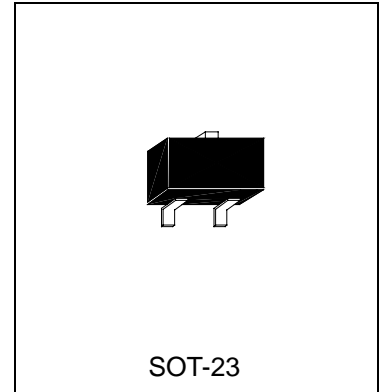


HMBT5086

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

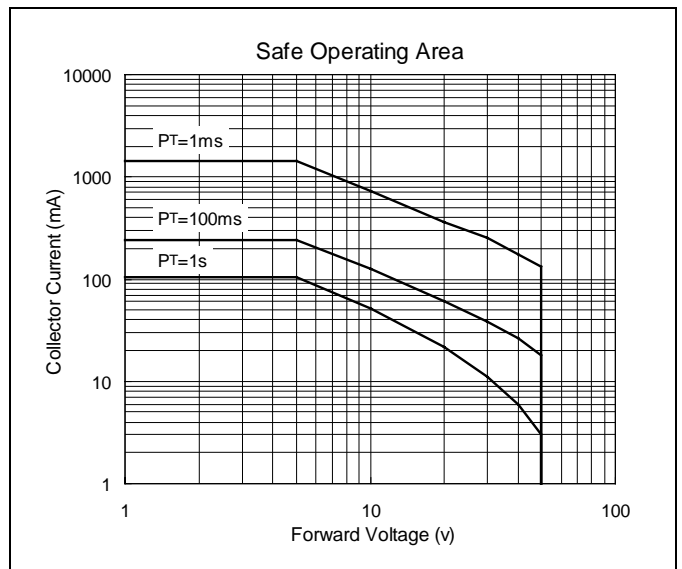
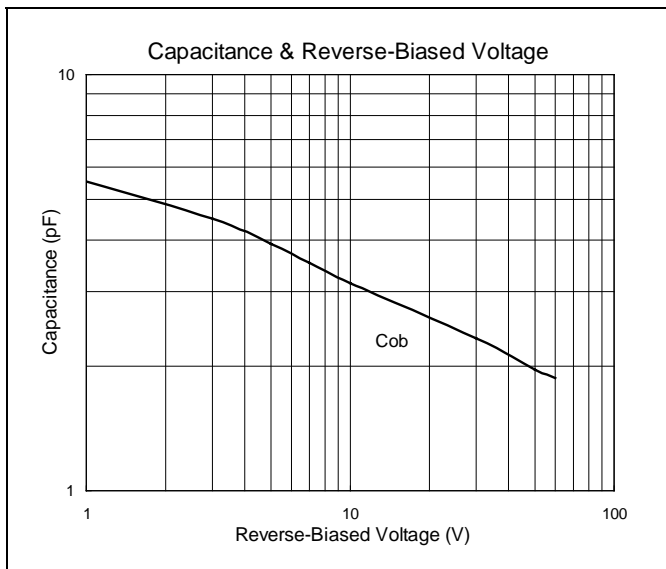
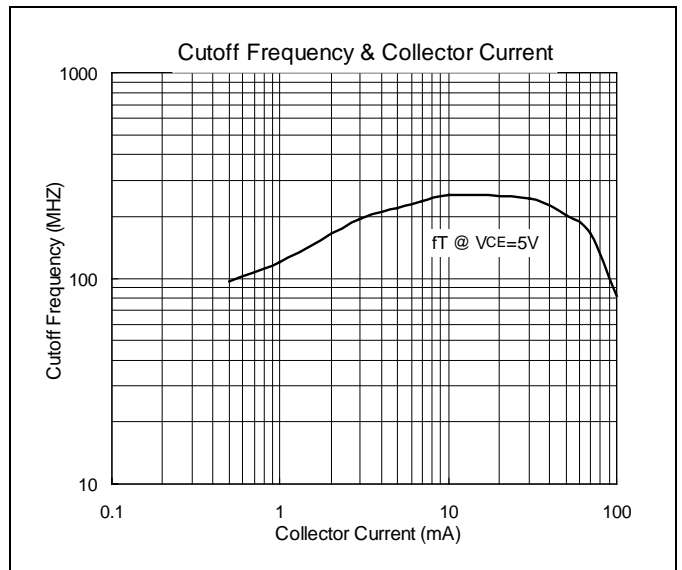
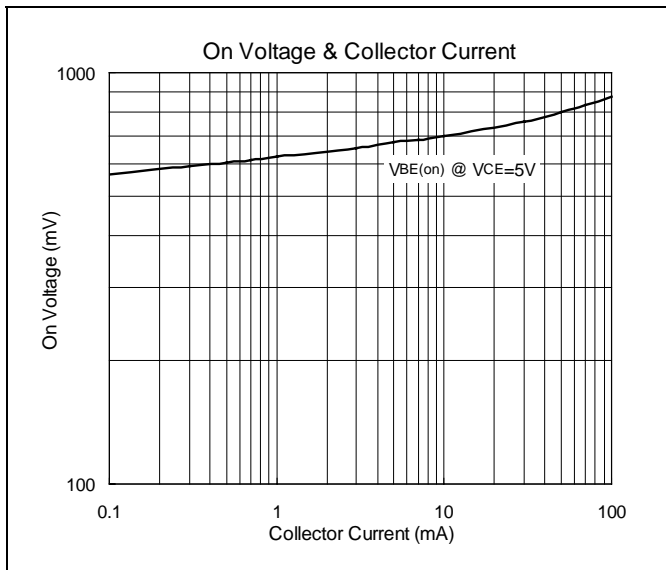
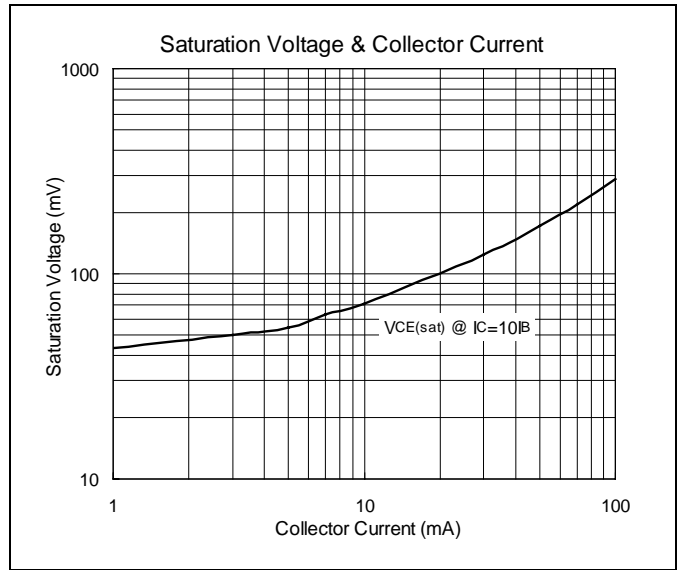
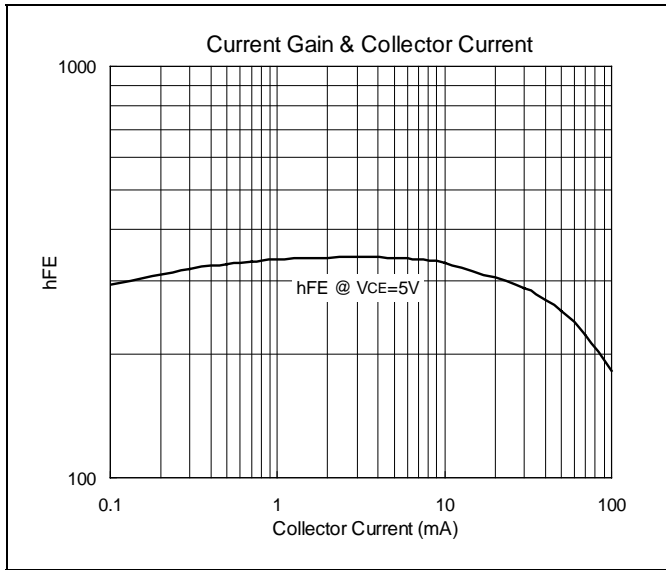
Characteristics (Ta=25°C)

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%

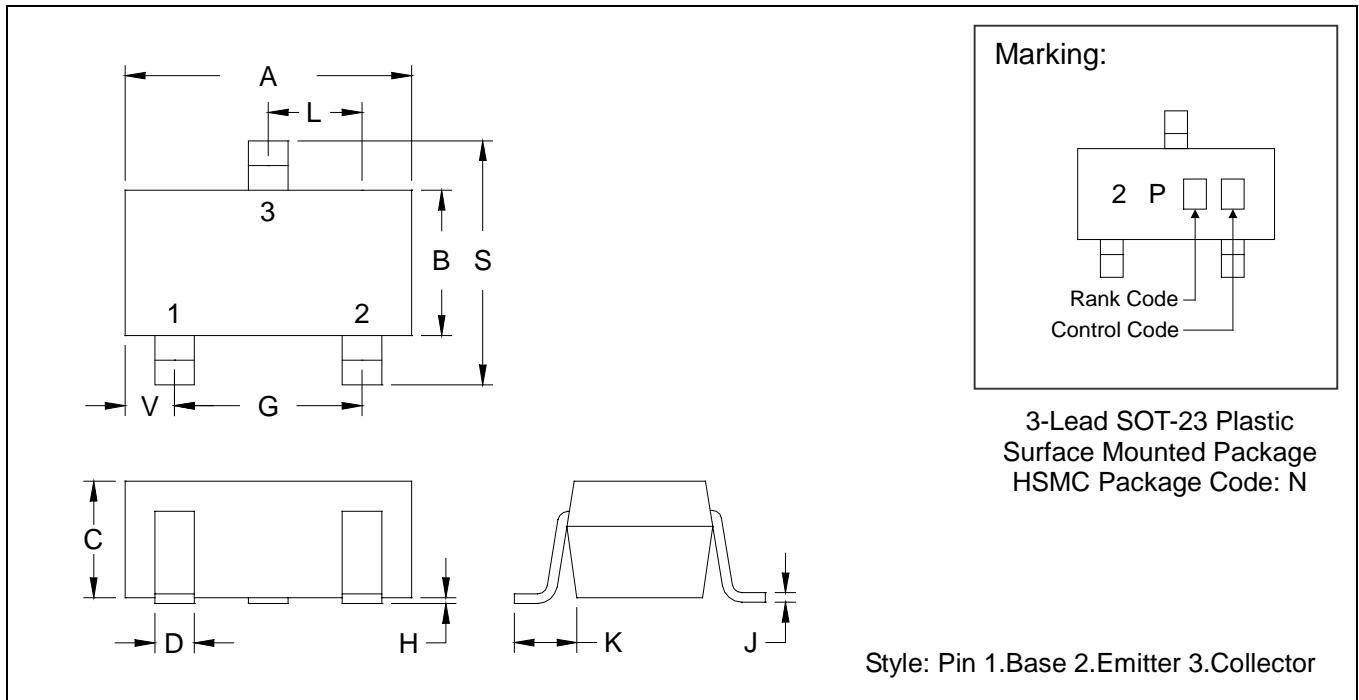


Characteristics Curve





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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