



HMBT2907A

PNP EPITAXIAL PLANAR TRANSISTOR

Description

The HMBT2907A is designed for general purpose amplifier and high speed switching, medium power switching applications.

Features

- Low Collector Saturation Voltage
- High Speed Switching
- For Complementary Use With NPN Type HMBT2222A

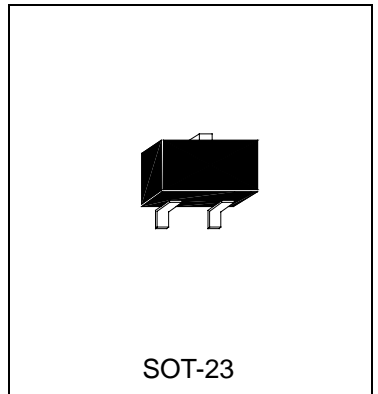
Absolute Maximum Ratings

- Maximum Temperatures
 Storage Temperature -55 ~ +150 °C
 Junction Temperature..... +150 °C
- Maximum Power Dissipation
 Total Power Dissipation (Ta=25°C) 225 mW
- Maximum Voltages and Currents (Ta=25°C)
 VCBO Collector to Base Voltage -60 V
 VCEO Collector to Emitter Voltage..... -60 V
 VEBO Emitter to Base Voltage -5 V
 IC Collector Current..... -600 mA

Characteristics (Ta=25°C)

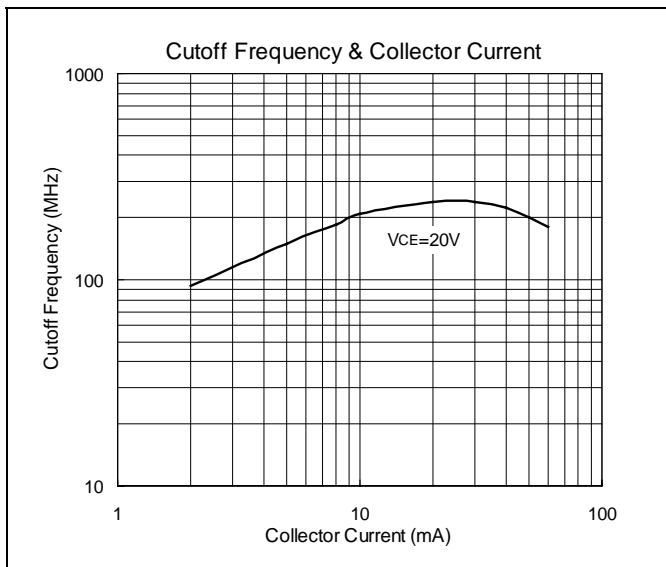
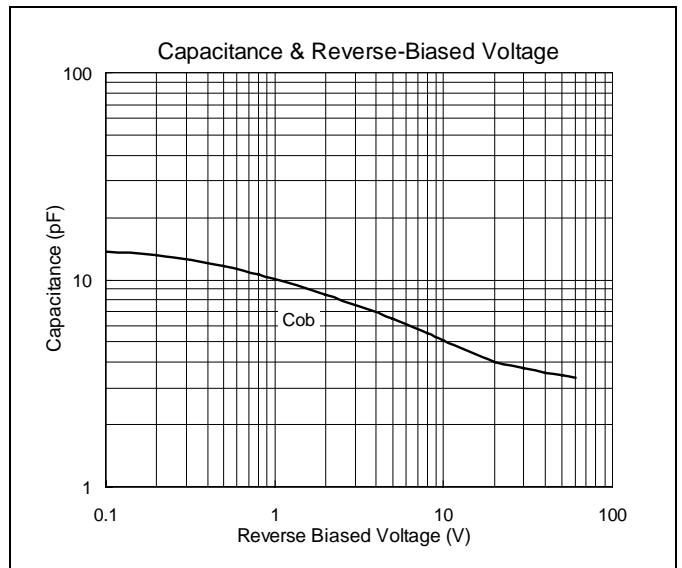
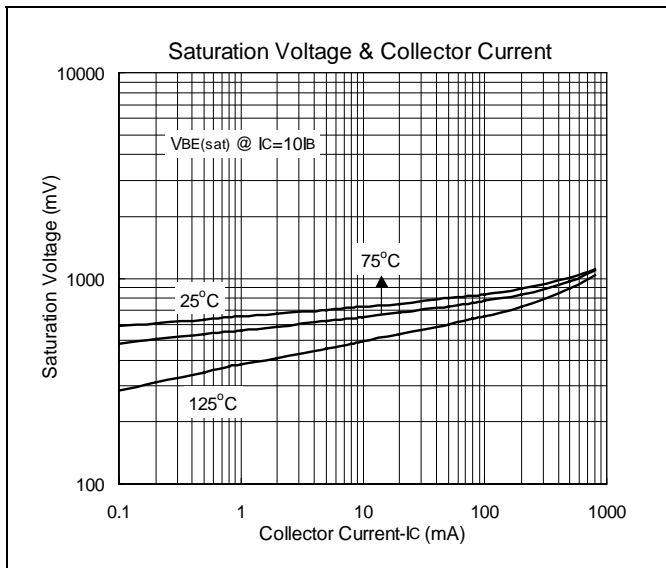
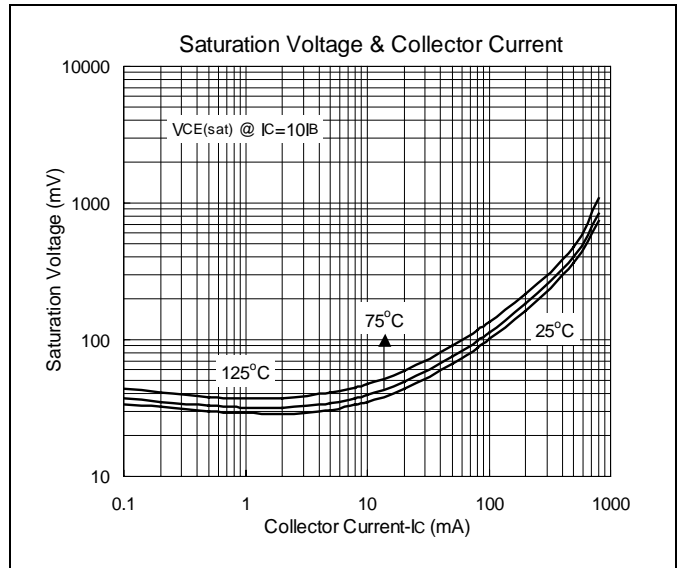
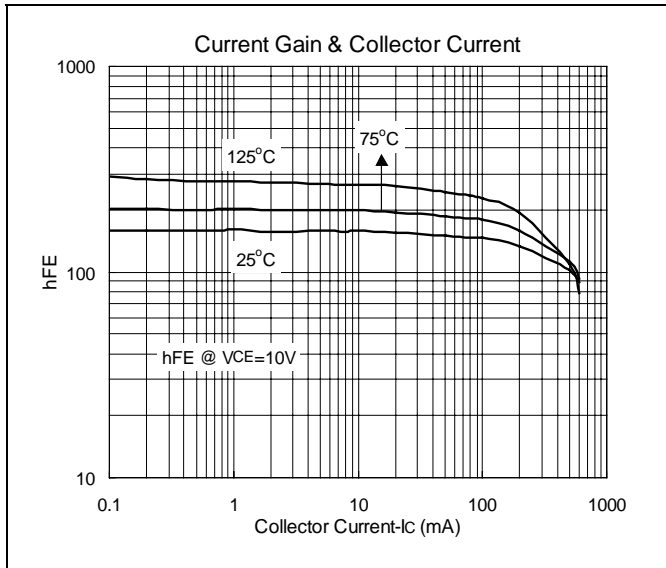
Symbol	Min.	Typ.	Max.	Unit	Test Conditions
BVCEO	-60	-	-	V	IC=-10uA
BVCE0	-60	-	-	V	IC=-10mA
BVEBO	-5	-	-	V	IC=-10uA
ICBO	-	-	-10	nA	VCB=-50V
ICEX	-	-	-50	nA	VCE=-30V, VBE=-0.5V
*VCE(sat)1	-	-0.2	-0.4	V	IC=-150mA, IB=-15mA
*VCE(sat)2	-	-0.5	-1.6	V	IC=-500mA, IB=-50mA
*VBE(sat)1	-	-	-1.3	V	IC=-150mA, IB=-15mA
*VBE(sat)2	-	-	-2.6	V	IC=-500mA, IB=-50mA
*hFE1	75	-	-		VCE=-10V, IC=-100uA
*hFE2	100	-	-		VCE=-10V, IC=-1mA
*hFE3	100	-	-		VCE=-10V, IC=-10mA
*hFE4	100	180	300		VCE=-10V, IC=-150mA
*hFE5	50	-	-		VCE=-10V, IC=-500mA
fT	200	-	-	MHz	VCB=-20V, IC=-50mA, f=100MHz
Cob	-	-	8	pF	VCB=-10V, f=1MHz

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



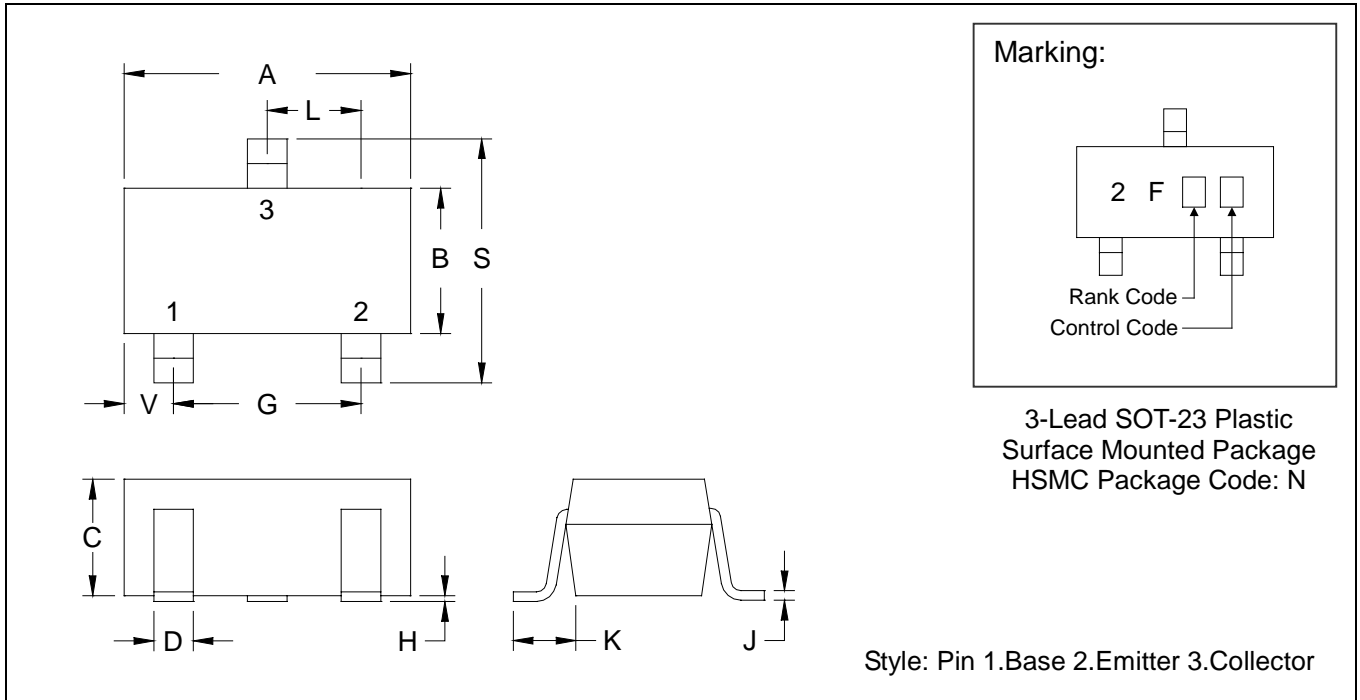


Characteristics Curve





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

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