



HMBT1015

PNP EPITAXIAL PLANAR TRANSISTOR

Description

The HMBT1015 is designed for use in driver stage of AF amplifier and general purpose amplification.

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 -5 V
IC Collector Current -150 mA

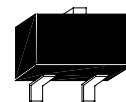
Characteristics (Ta=25°C)

Symbol	Min.	Typ.	Max.	Unit	Test Conditions
BVCBO	-50	-	-	V	IC=-100uA
BVCEO	-50	-	-	V	IC=-1mA
BVEBO	-5	-	-	V	IE=-10uA
ICBO	-	-	-100	nA	VCB=-50V
IEBO	-	-	-100	nA	VEB=-5V
*VCE(sat)	-	-	-300	mV	IC=-100mA, IB=-10mA
*VBE(sat)	-	-	-1.1	V	IC=-100mA, IB=-10mA
*hFE1	120	-	700		VCE=-6V, IC=-2mA
*hFE2	25	-	-		VCE=-6V, IC=-150mA
fT	80	-	-	MHz	VCE=-10V, IC=-1mA, f=100MHz
Cob	-	-	7	pF	VCB=-10V, f=1MHz, IE=0

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

Classification Of hFE1

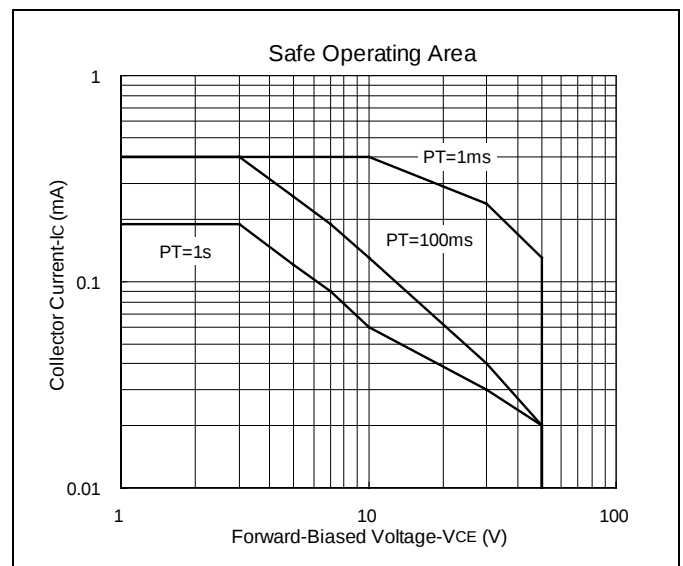
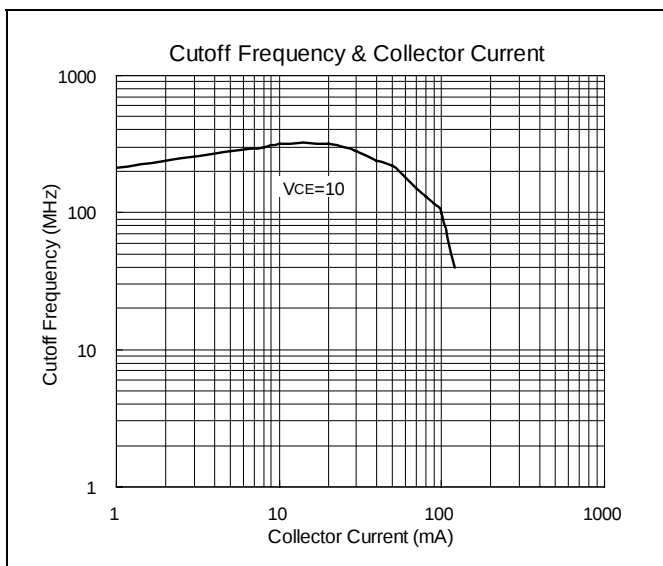
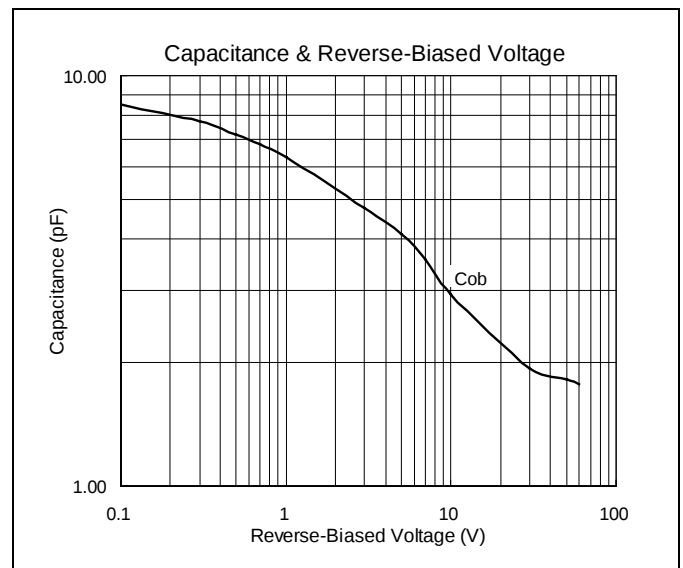
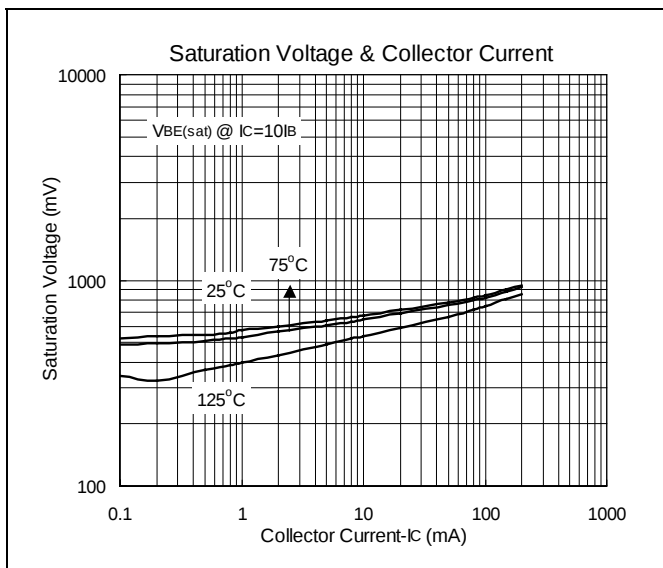
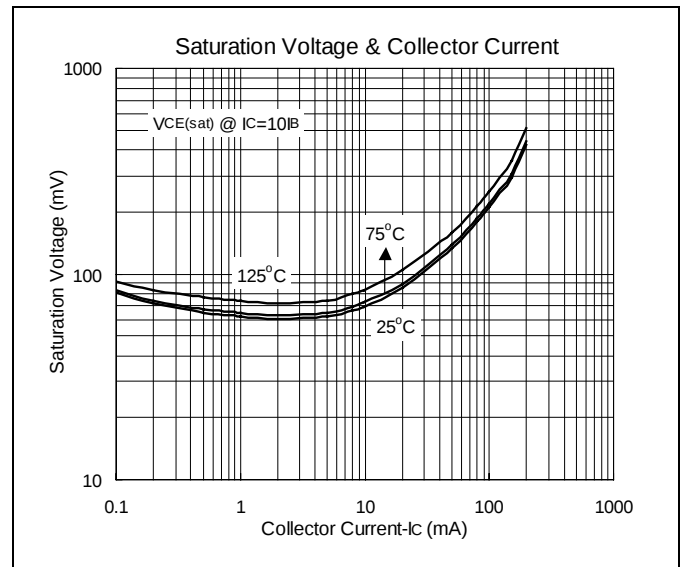
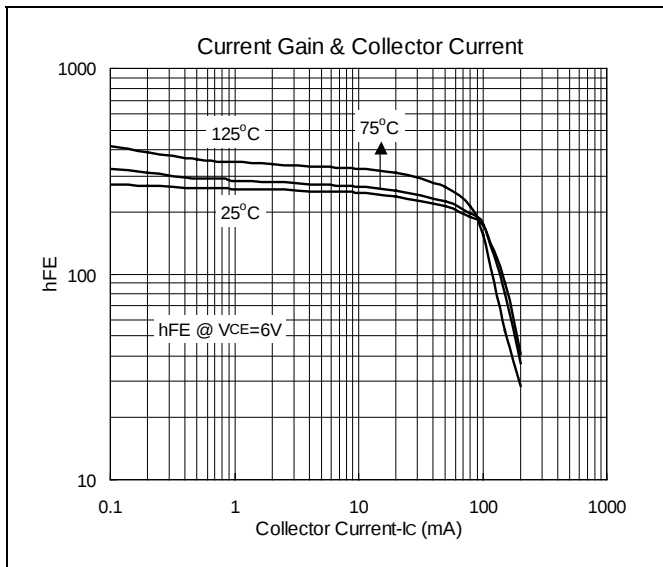
Rank	A4Y	A4G	A4B
Range	120-240	200-400	350-700



SOT-23

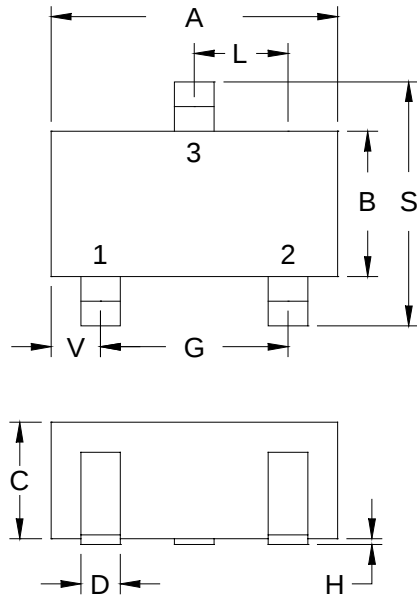


Characteristics Curve

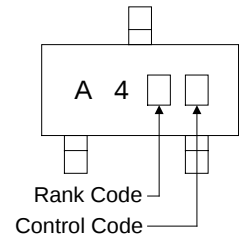




SOT-23 Dimension



Marking:



3-Lead SOT-23 Plastic
Surface Mounted Package
HSMC Package Code: N

Style: Pin 1.Base 2.Emitter 3.Collector

*: 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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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