



HMBT1815

NPN EPITAXIAL PLANAR TRANSISTOR

Description

The HMBT1815 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 60 V
VCEO Collector to Emitter Voltage..... 50 V
VEBO Emitter to Base Voltage..... 5 V
IC Collector Current..... 150 mA

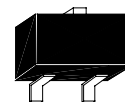
Characteristics (Ta=25°C)

Symbol	Min.	Typ.	Max.	Unit	Test Conditions
BVCBO	60	-	-	V	IC=100uA
BVCEO	50	-	-	V	IC=1mA
BVEBO	5	-	-	V	IE=10uA
ICBO	-	-	100	nA	VCB=60V
IEBO	-	-	100	nA	VEB=5V
*VCE(sat)	-	-	250	mV	IC=100mA, IB=10mA
*VBE(sat)	-	-	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	-	-	3.5	pF	VCB=10V, f=1MHz

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

Classification Of hFE1

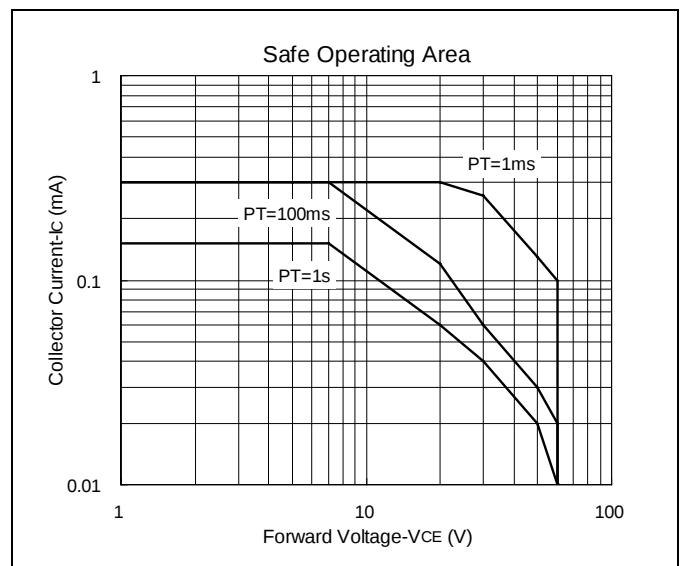
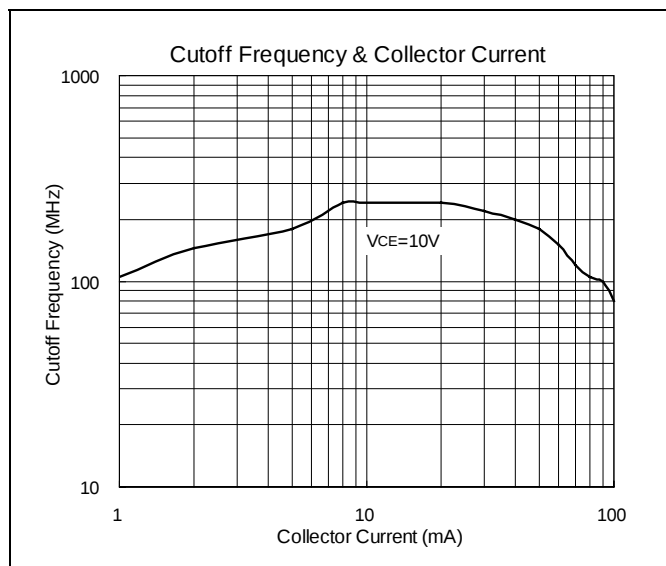
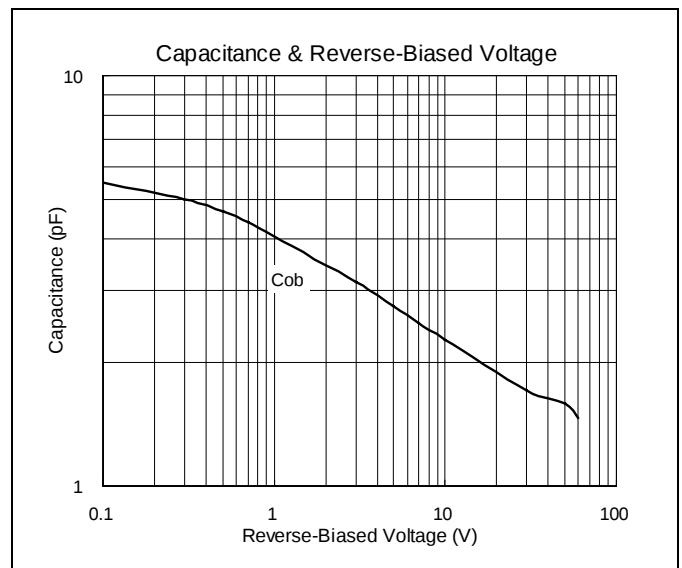
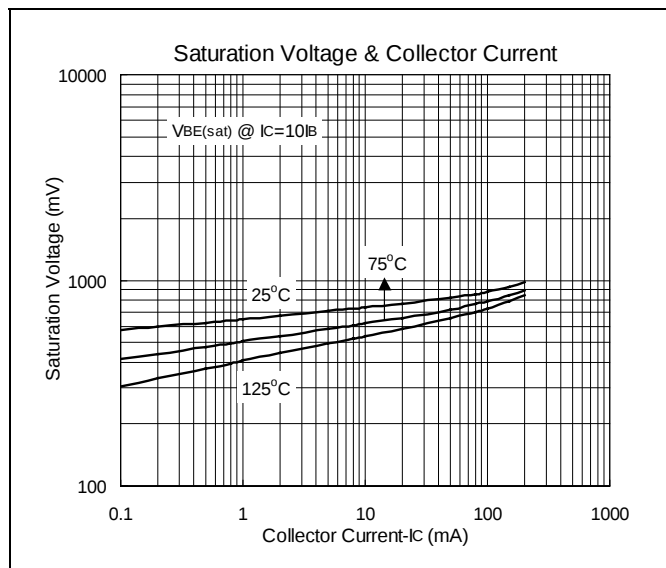
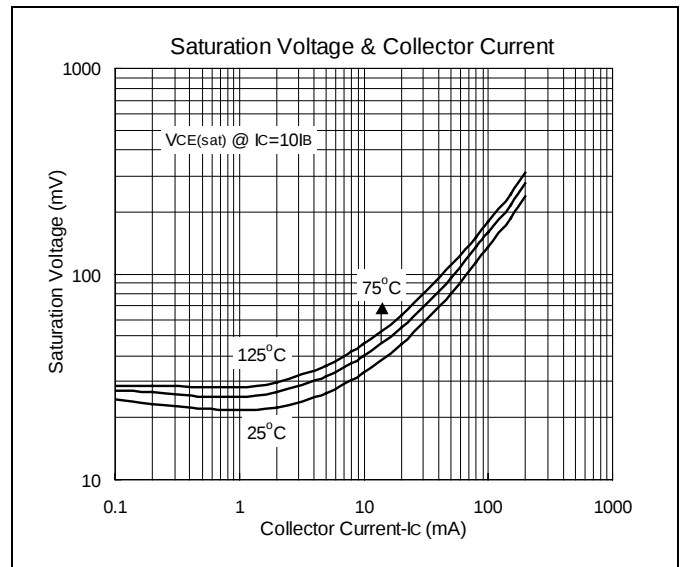
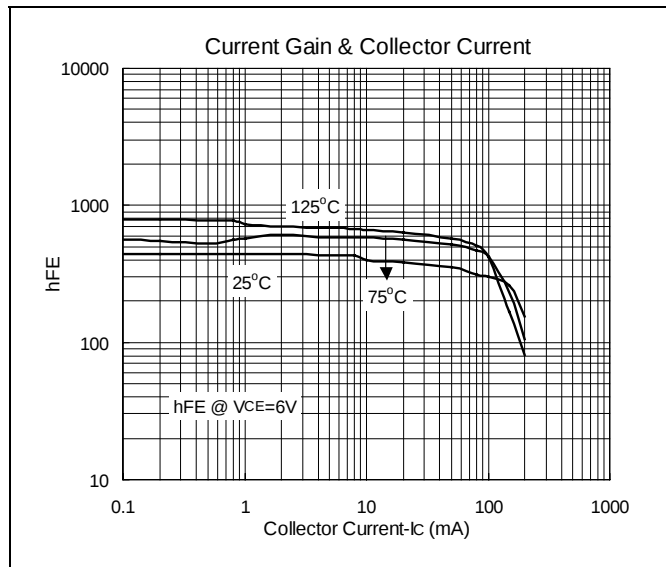
Rank	C4Y	C4G	C4B
Range	120-240	200-400	350-700



SOT-23

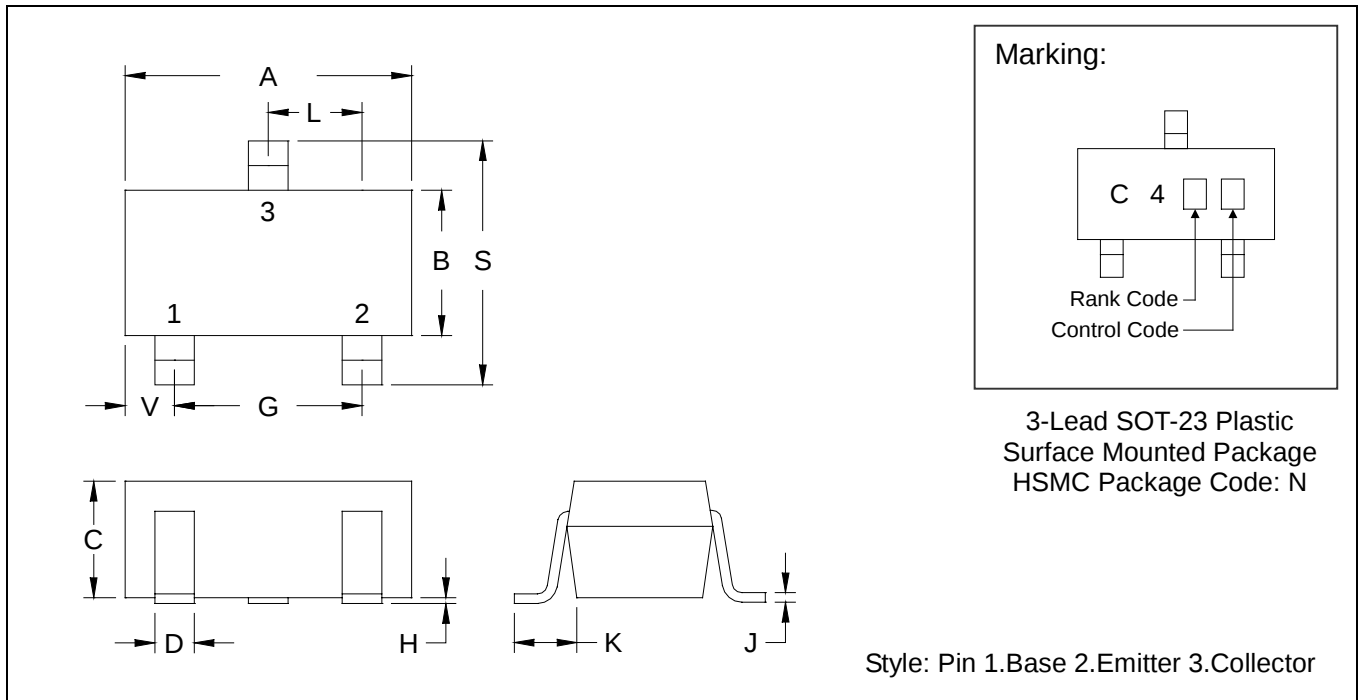


Characteristics Curve





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