



HMBT8550

PNP EPITAXIAL TRANSISTOR

Description

The HMBT8550 is designed for general purpose amplifier applications.

Features

- High DC Current: $h_{FE}=150-400$ at $I_C=150\text{mA}$
- Complementary to HMBT8050

Absolute Maximum Ratings

- Maximum Temperatures
Storage Temperature $-55 \sim +150\text{ }^{\circ}\text{C}$
Junction Temperature..... $+150\text{ }^{\circ}\text{C}$ Maximum
- Maximum Power Dissipation
Total Power Dissipation ($T_a=25^{\circ}\text{C}$) 225 mW
- Maximum Voltages and Currents ($T_a=25^{\circ}\text{C}$)
VCBO Collector to Base Voltage -25 V
VCEO Collector to Emitter Voltage..... -20 V
VEBO Emitter to Base Voltage -5 V
IC Collector Current -700 mA

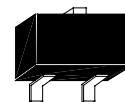
Characteristics ($T_a=25^{\circ}\text{C}$)

Symbol	Min.	Typ.	Max.	Unit	Test Conditions
BVCBO	-25	-	-	V	$I_C=-10\mu\text{A}$
BVCEO	-20	-	-	V	$I_C=-1\text{mA}$
BVEBO	-5	-	-	V	$I_E=-10\mu\text{A}$
ICBO	-	-	-1	μA	$V_{CB}=-20\text{V}$
IEBO	-	-	-100	nA	$V_{EB}=-6\text{V}$
*VCE(sat)	-	-	-500	mV	$I_C=-500\text{mA}$, $I_B=-50\text{mA}$
VBE(on)	-	-	-1	V	$V_{CE}=-1\text{V}$, $I_C=-150\text{mA}$
*hFE	100	-	500		$V_{CE}=-1\text{V}$, $I_C=-150\text{mA}$
ft	150	-	-	MHz	$V_{CE}=-10\text{V}$, $I_C=-20\text{mA}$, $f=100\text{MHz}$
Cob	-	-	10	pF	$V_{CB}=-10\text{V}$, $f=1\text{MHz}$

*Pulse Test: Pulse Width $\leq 380\mu\text{s}$, Duty Cycle $\leq 2\%$

Classification Of h_{FE}

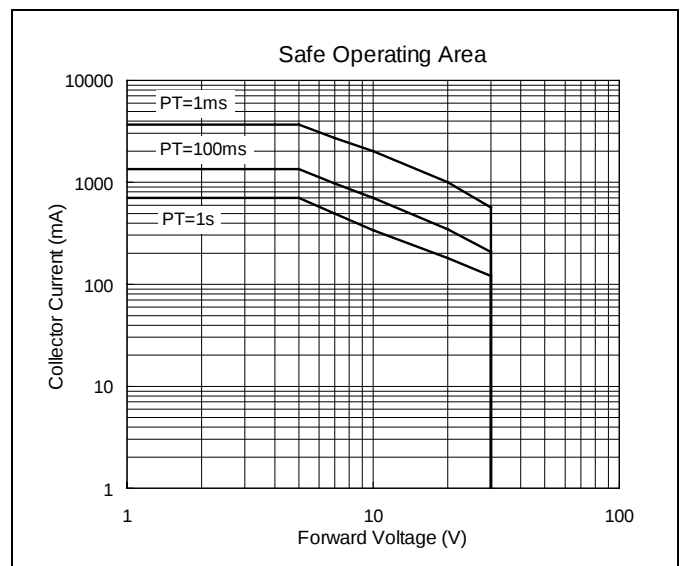
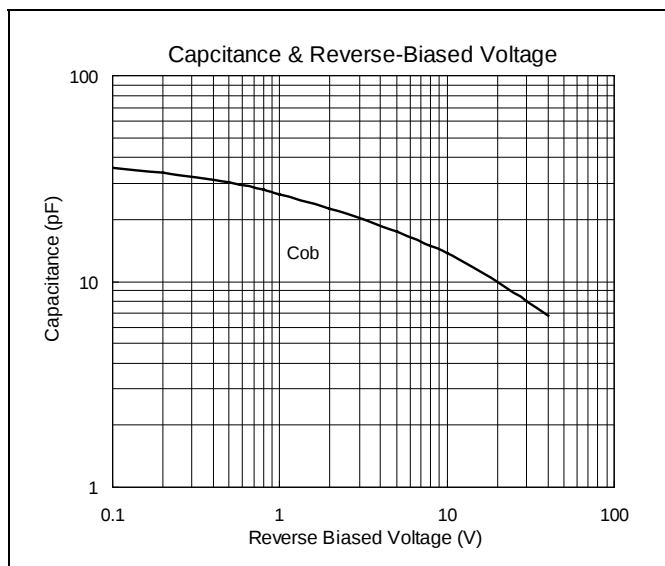
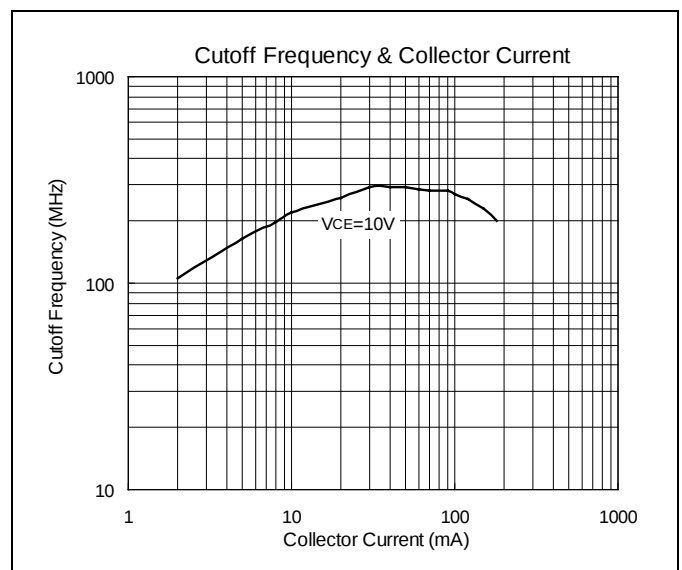
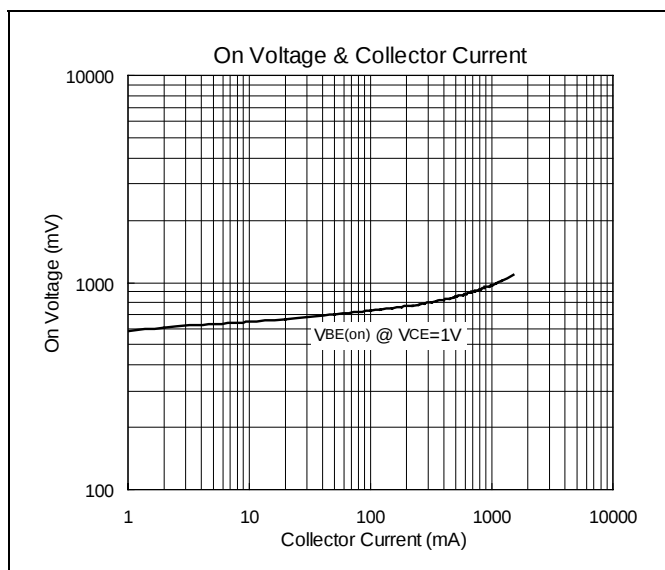
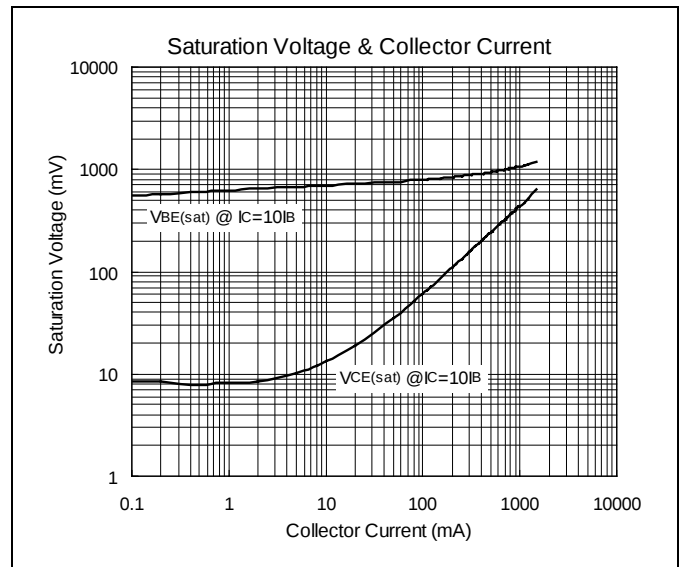
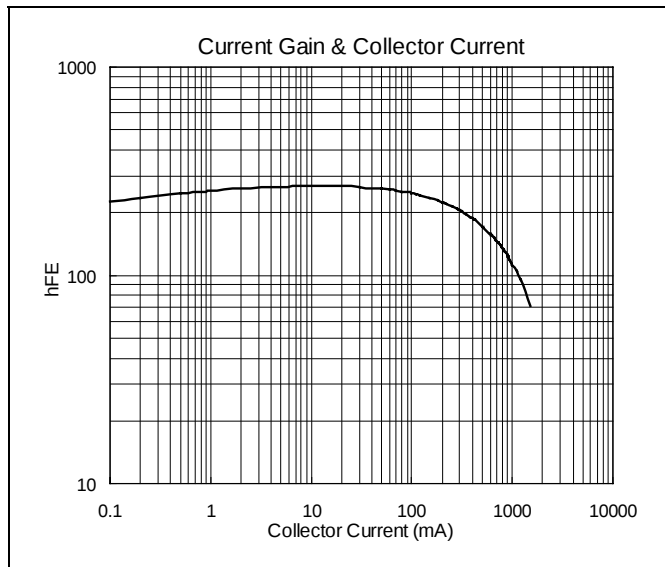
Rank	B9C	B9D	B9E
Range	100-200	150-300	250-500



SOT-23

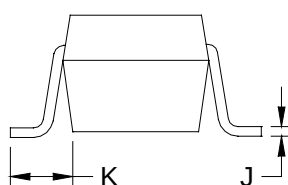
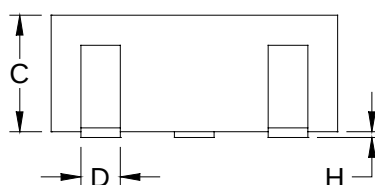
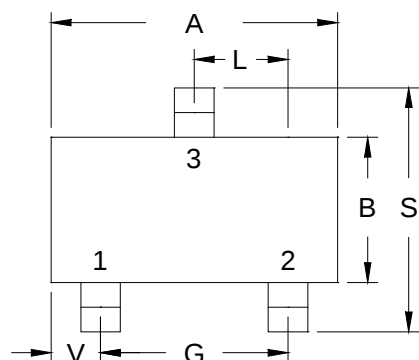


Characteristics Curve

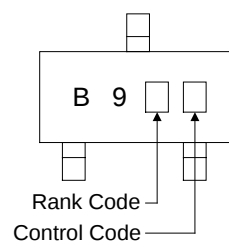




SOT-23 Dimension



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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