



HMBT5551

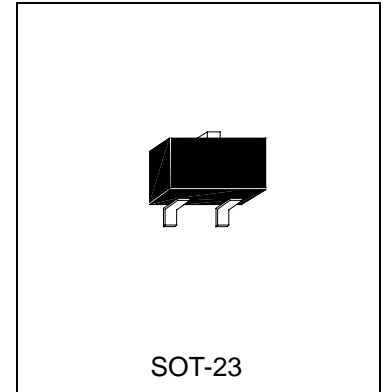
NPN EPITAXIAL PLANAR TRANSISTOR

Description

The HMBT5551 is designed for general purpose applications requiring high Breakdown Voltages.

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 180 V
 VCEO Collector to Emitter Voltage..... 160 V
 VEBO Emitter to Base Voltage..... 6 V
 IC Collector Current..... 600 mA



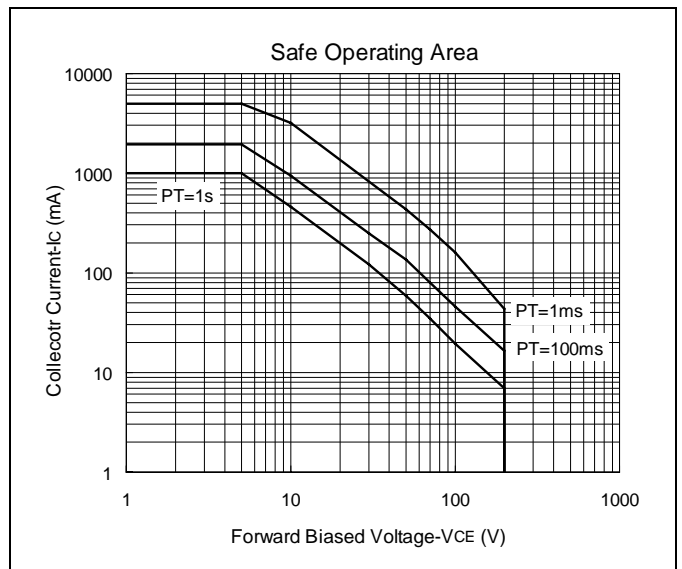
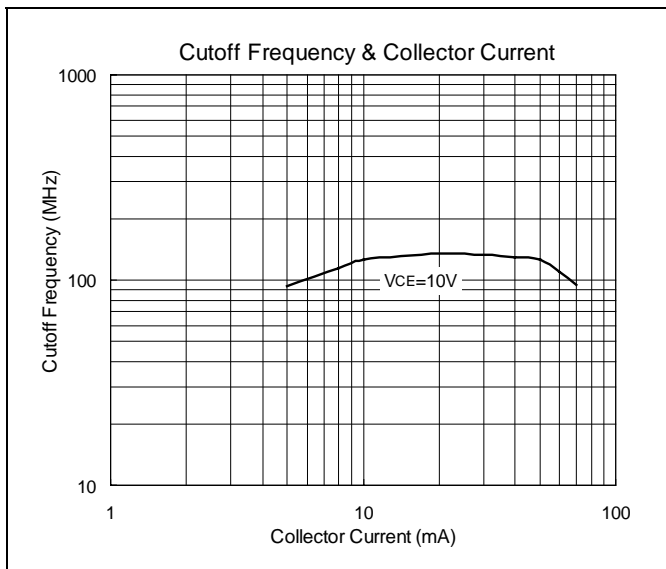
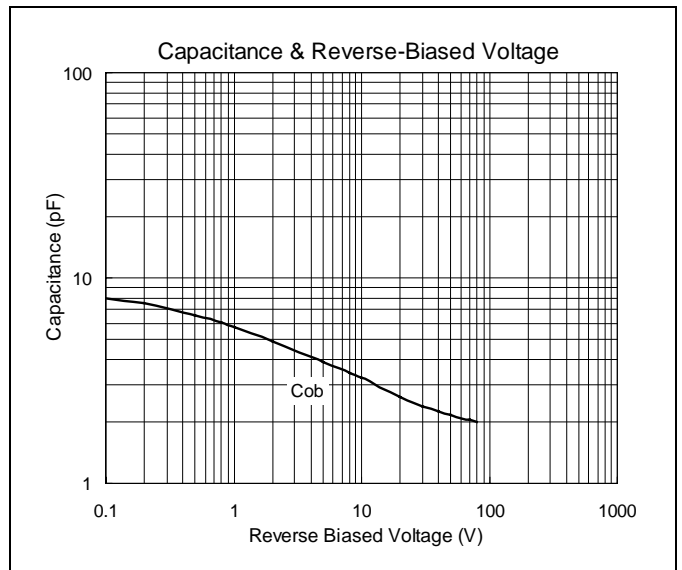
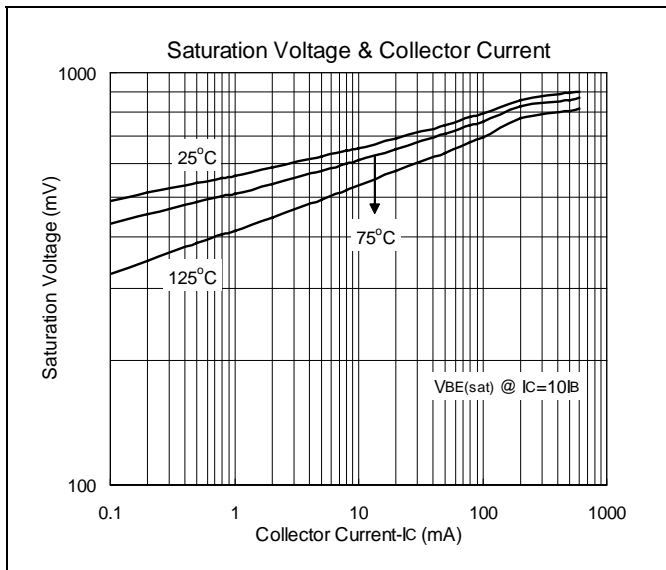
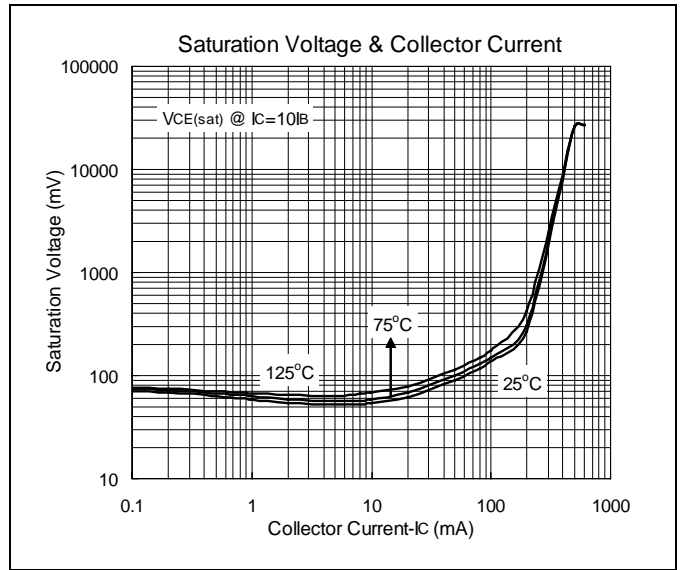
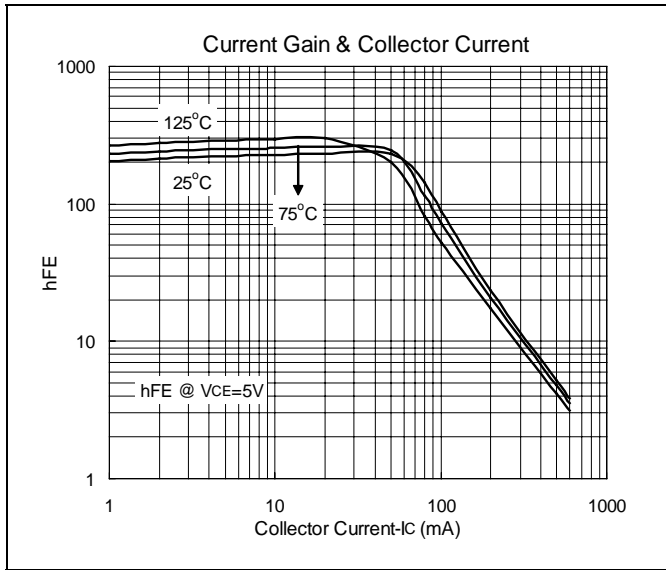
Characteristics (Ta=25°C)

Symbol	Min.	Typ.	Max.	Unit	Test Conditions
BVCBO	180	-	-	V	IC=100uA
BVCEO	160	-	-	V	IC=1.0mA
BVEBO	6	-	-	V	IE=10uA
ICBO	-	-	50	nA	VCB=120V
IEBO	-	-	50	nA	VEB=4V
*VCE(sat)1	-	-	0.15	V	IC=10mA, IB=1.0mA
*VCE(sat)2	-	-	0.2	V	IC=50mA, IB=5mA
*VBE(sat)1	-	-	1	V	IC=10mA, IB=1mA
*VBE(sat)2	-	-	1	V	IC=50mA, IB=5mA
*hFE1	80	-	-		VCE=5V, IC=1mA
*hFE2	80	-	250		VCE=5V, IC=10mA
*hFE3	30	-	-		VCE=5V, IC=50mA
fT	100	-	300	MHz	IC=10mA, VCE=10V, f=100MHz
Cob	-	-	6	pF	VCB=10V, f=1MHz

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

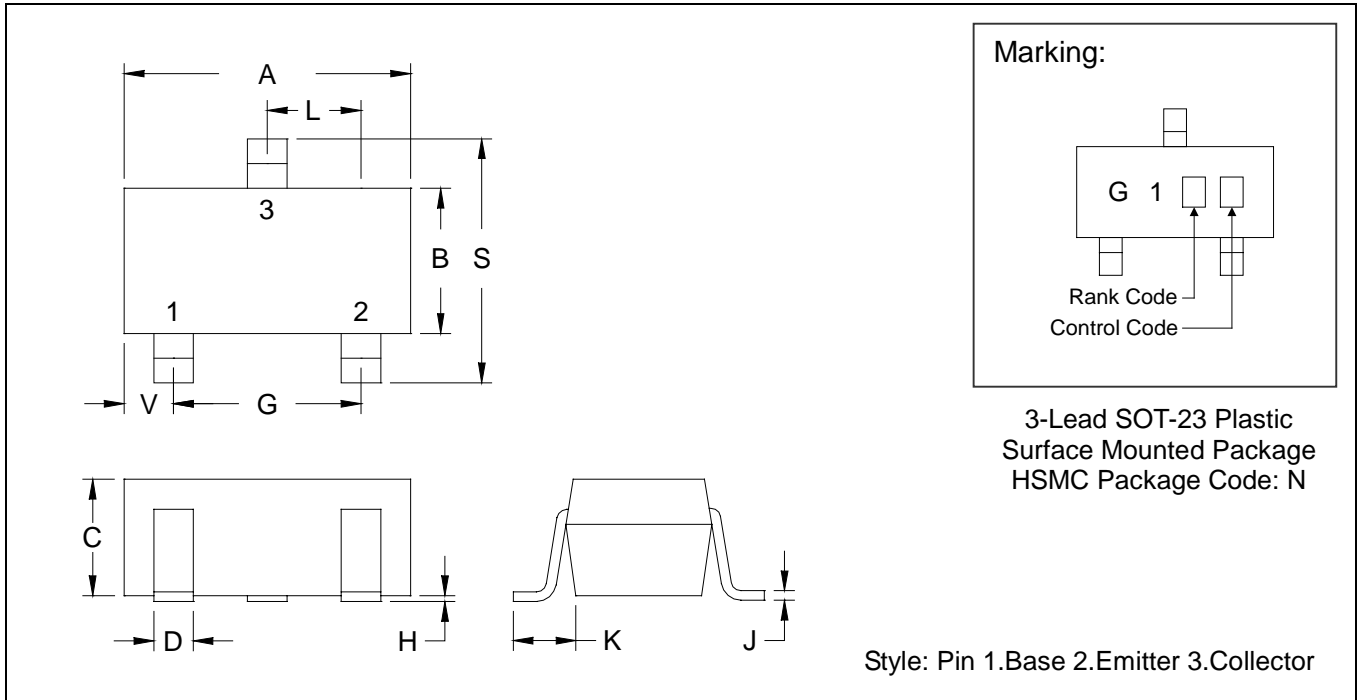


Characteristics Curve





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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