

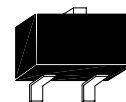


HMBTA42

NPN EPITACIAL PLANAR TRANSISTOR

Description

High Voltage Transistor



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 300 V
VCEO Collector to Emitter Voltage 300 V
VEBO Emitter to Base Voltage 6 V
IC Collector Current 500 mA

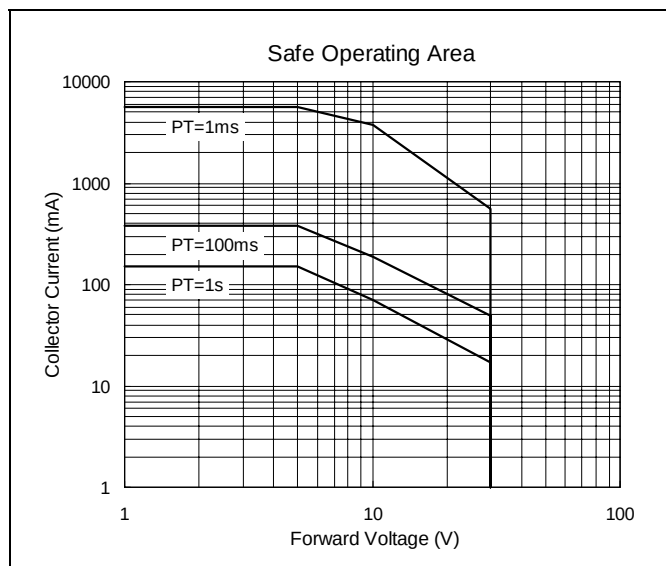
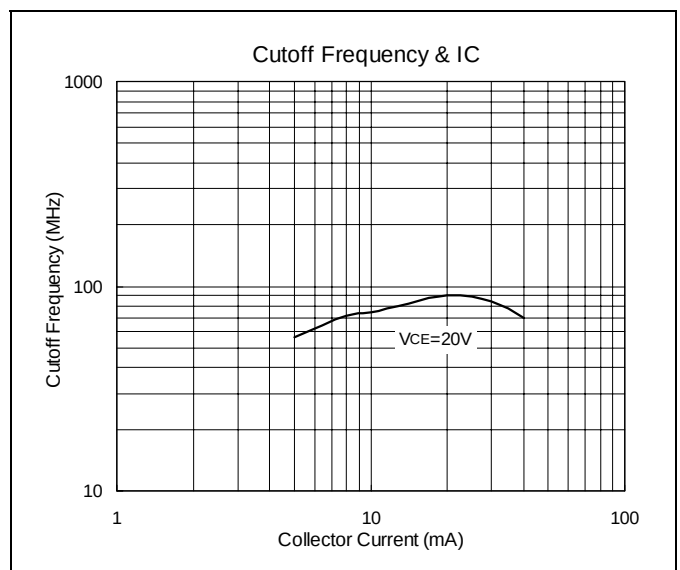
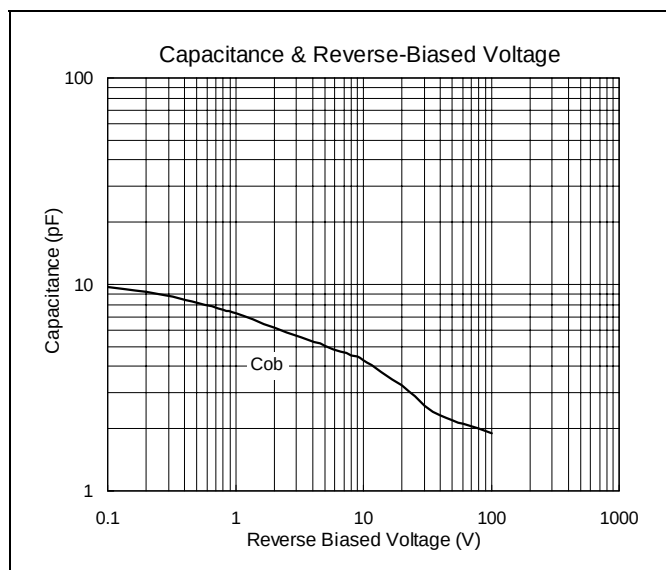
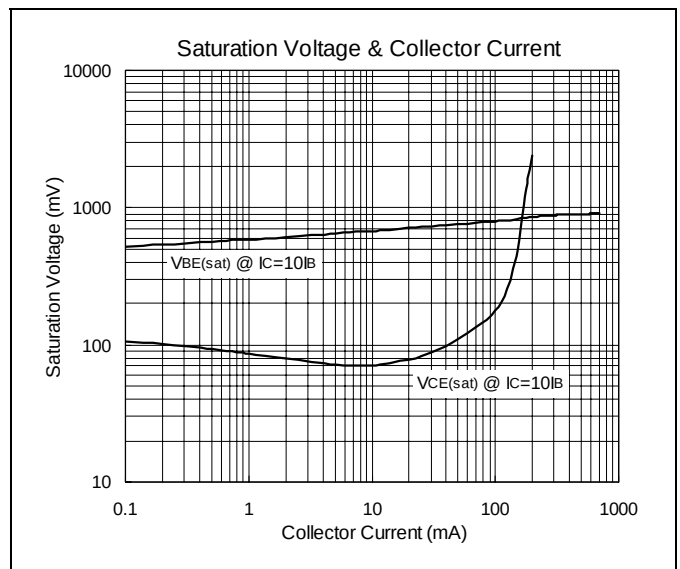
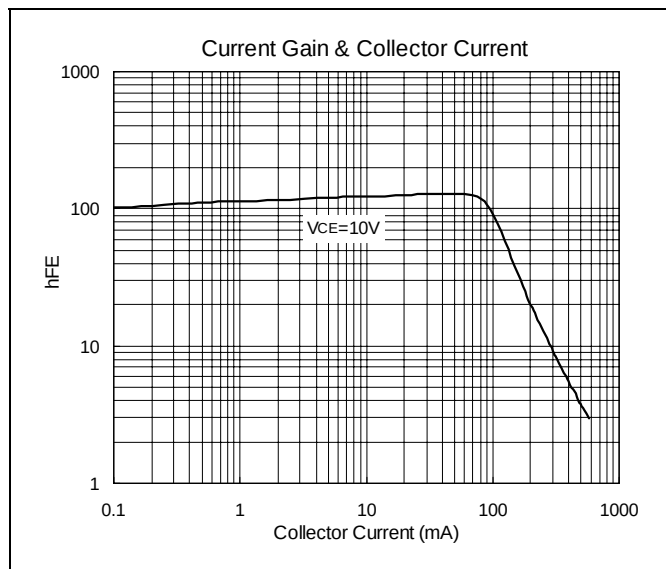
Characteristics (Ta=25°C)

Symbol	Min.	Typ.	Max.	Unit	Test Conditions
BVCBO	300	-	-	V	IC=100uA
BVCEO	300	-	-	V	IC=1mA
BVEBO	6	-	-	V	IE=10uA
ICBO	-	-	100	nA	VCB=200V
IEBO	-	-	100	nA	VEB=6V
*VCE(sat)	-	-	500	mV	IC=20mA, IB=2mA
*VBE(sat)	-	-	900	mV	IC=20mA, IB=2mA
*hFE1	25	-	-		IC=1mA, VCE=10V
*hFE2	40	-	-		IC=10mA, VCE=10V
*hFE3	40	-	-		IC=30mA, VCE=10V
fT	50	-	-	MHz	IC=10mA, VCE=20V, f=100MHz
Cob	-	-	3	pF	VCB=20V, f=1MHz

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

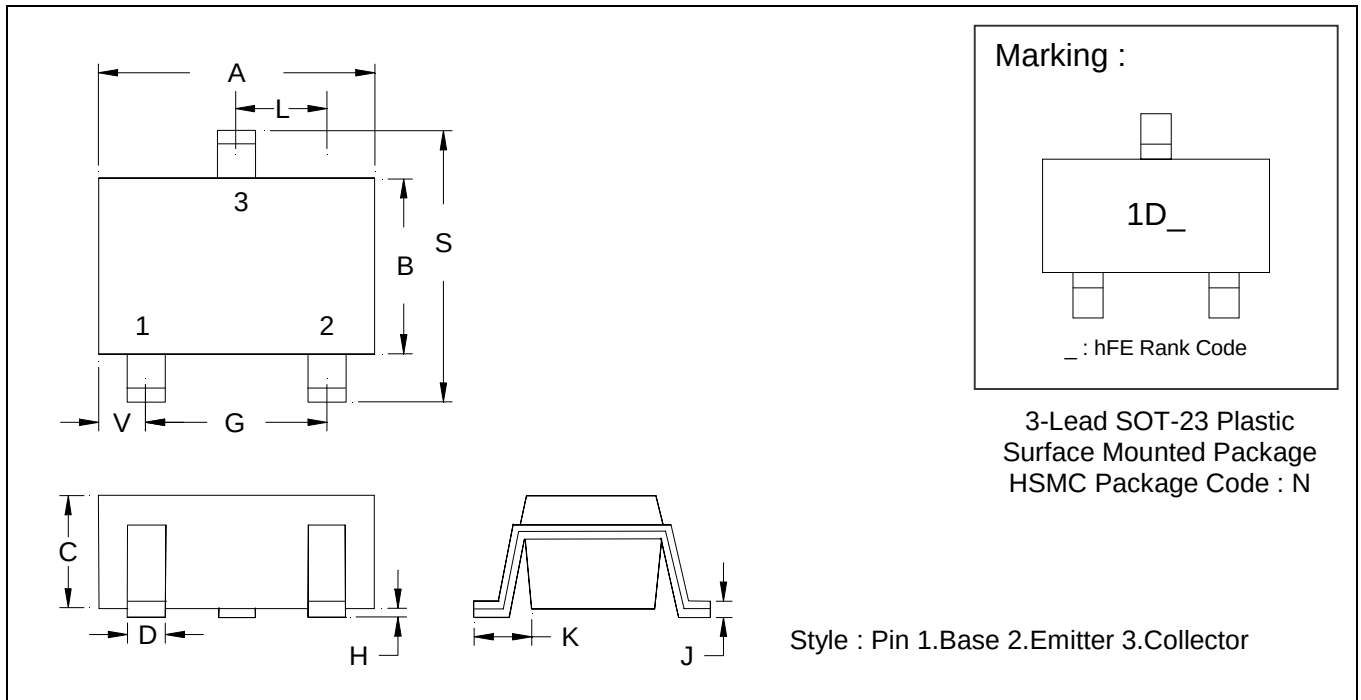


Characteristics Curve





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	0.85	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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