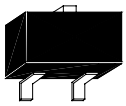
HMBTA94

PNP EPITAXIAL PLANAR TRANSISTOR



SOT-23

Description

The HMBTA94 is designed for application that requires high voltage.

Features

- High Breakdown Voltage: VCEO=400(Min.) at IC=1mA
- Complementary to HMBTA44

Absolute Maximum Ratings

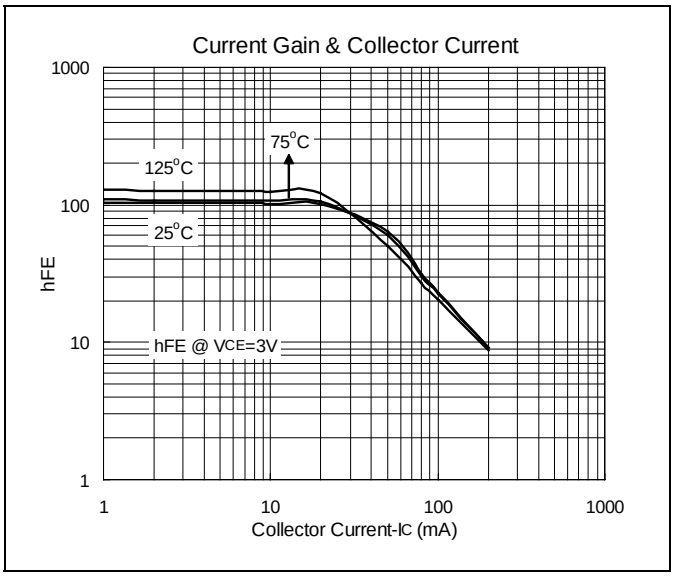
- Maximum Temperatures
  Storage Temperature ..... -55 ~ +150 °C
  Junction Temperature ..... +150 °C Maximum
- Maximum Power Dissipation
  Total Power Dissipation (Ta=25°C) ..... 350 mW
- Maximum Voltages and Currents (Ta=25°C)
  VCBO Collector to Base Voltage ..... -400 V
  VCEO Collector to Emitter Voltage ..... -400 V
  VEBO Emitter to Base Voltage ..... -6 V
  IC Collector Current ..... -150 mA

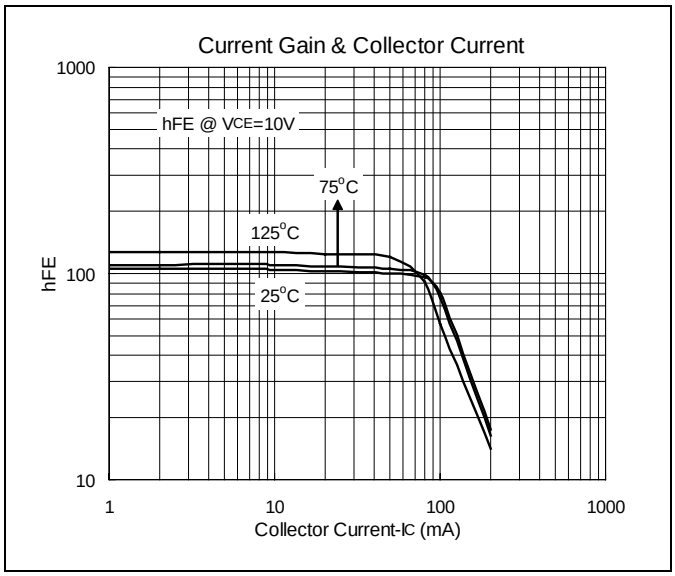
Characteristics (Ta=25°C)

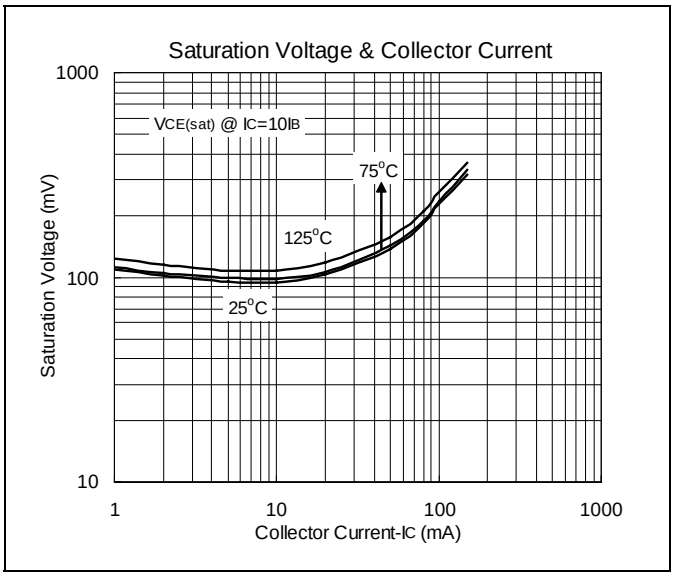
Symbol	Min.	Typ.	Max.	Unit	Test Conditions
BVCBO	-400	-	-	V	IC=-100uA, IE=0
BVCEO	-400	-	-	V	IC=-1mA, IB=0
BVEBO	-6	-	-	V	IE=-10uA, IC=0
ICBO	-	-	-100	nA	VCB=-400V, IE=0
IEBO	-	-	-100	nA	VEB=-6V, IC=0
ICES	-	-	-500	nA	VCE=-400V, VBE=0
*VCE(sat)1	-	-	-200	mV	IC=-1mA, IB=-0.1mA
*VCE(sat)2	-	-	-300	mV	IC=-10mA, IB=-1mA
*VCE(sat)3	-	-	-600	mV	IC=-50mA, IB=-5mA
*VBE(sat)	-	-	-900	mV	IC=-10mA, IB=-1mA
*hFE1	50	-	-		VCE=-10V, IC=-1mA
*hFE2	75	-	200		VCE=-10V, IC=-10mA
*hFE3	60	-	-		VCE=-10V, IC=-50mA
*hFE4	40	-	-		VCE=-10V, IC=-100mA
Cob	-	4	6	pF	VCE=-10V, f=1MHz

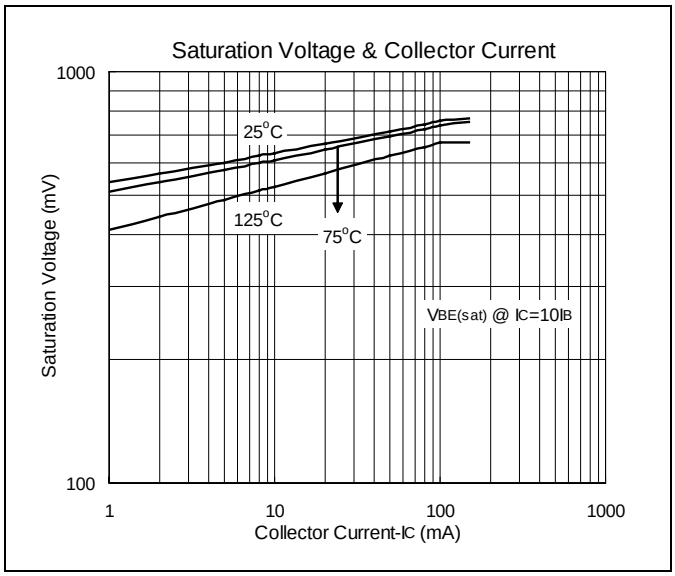
*Pulse Test: Pulse Width ≤380us, Duty Cycle≤2%

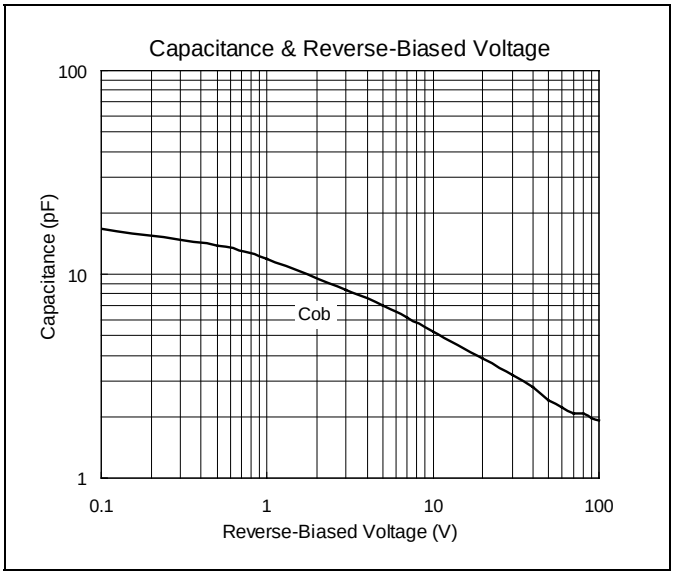
Characteristics Curve



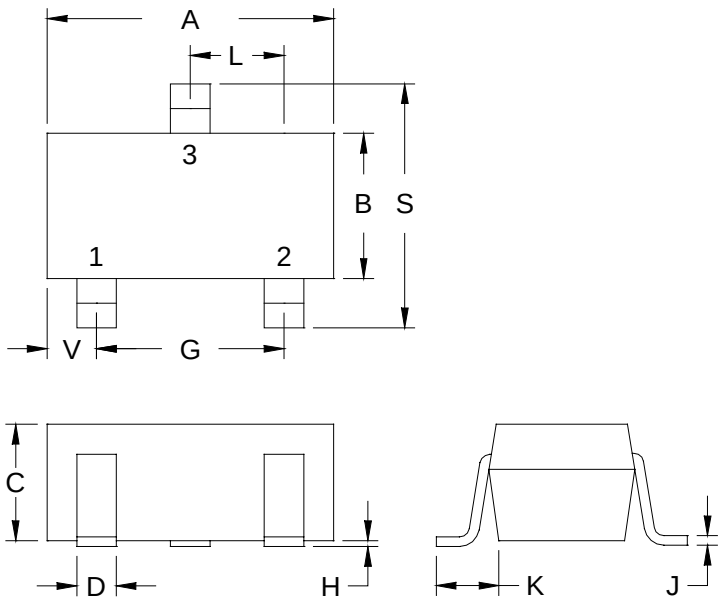




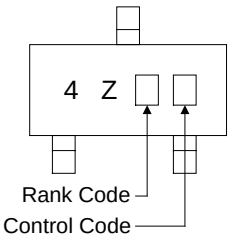




SOT-23 Dimension



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

Head Office And Factory:

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