

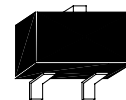


HBCW65C

NPN EPITAXIAL PLANAR TRANSISTOR

Description

The HBCW65C is a general purpose transistor.



SOT-23

Absolute Maximum Ratings

- Maximum Temperatures
Storage Temperature -65 ~ +150 °C
Junction Temperature +150 °C
- 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 32 V
VEBO Emitter to Base Voltage 5 V
IC Collector Current 800 mA

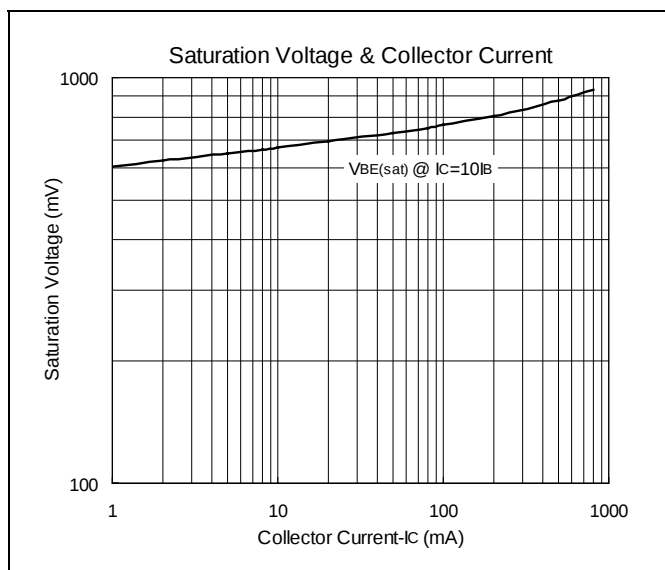
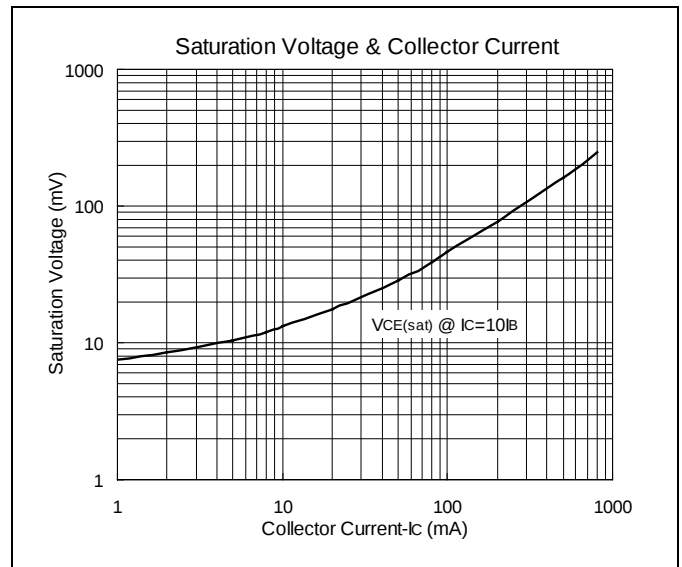
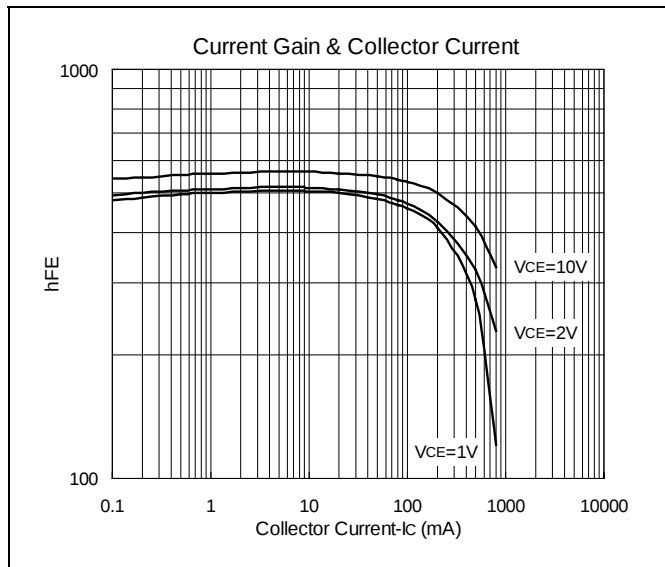
Characteristics (Ta=25°C)

Symbol	Min.	Typ.	Max.	Unit	Test Conditions
BVCBO	60	-	-	V	IC=10uA
BVCEO	32	-	-	V	IC=10mA
BVEBO	5	-	-	V	IE=10uA
ICBO	-	-	20	nA	VCB=32V, IE=0
IEBO	-	-	20	nA	VEB=4V, IC=0
*VCE(sat)1	-	-	700	mV	IC=500mA, IB=50mA
*VCE(sat)2	-	-	300	mV	IC=100mA, IB=10mA
*VBE(sat)	-	-	2.0	V	IC=500mA, IB=50mA
*hFE1	80	-	-		VCE=10V, IC=100uA
*hFE2	180	-	-		VCE=1V, IC=10mA
*hFE3	250	-	630		VCE=1V, IC=100mA
*hFE4	100	-	-		VCE=2V, IC=500mA
fT	-	170	-	MHz	VCE=10V, IC=20mA, f=100MHz
Cob	-	8	-	pF	VCB=10V, f=1.0MHz

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

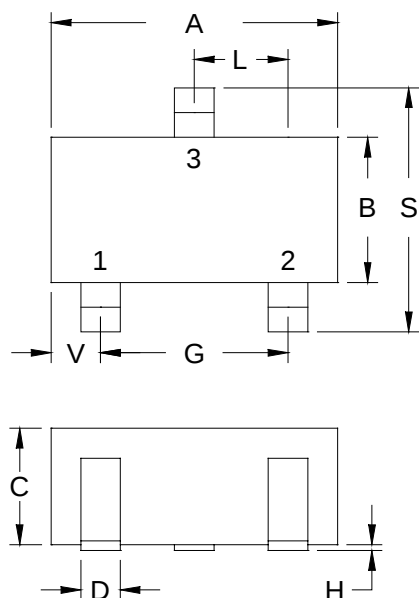


Characteristics Curve

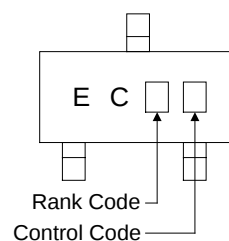




SOT-23 Dimension



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

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