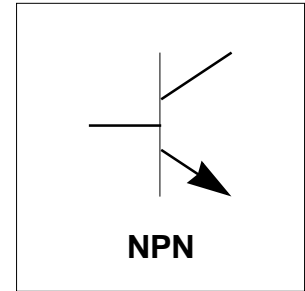


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2N3904

Revision Date: April 22, 1996



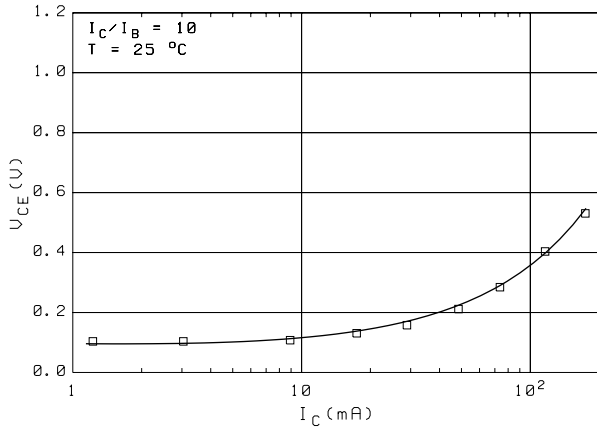
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Electrical Characteristics ($T_a = 25^\circ\text{C}$ unless otherwise noted)

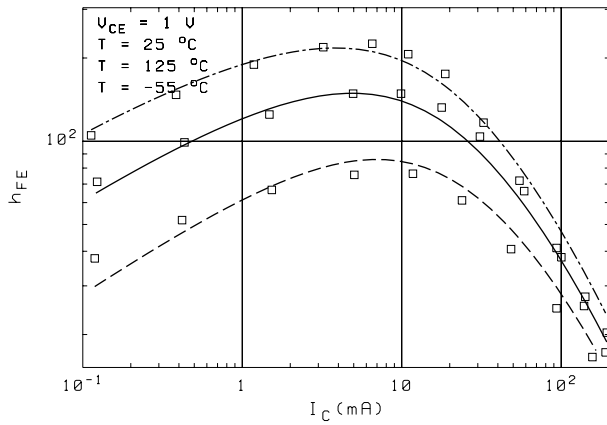
Testing Simulator: *MODPEX*

Spec.	Test Conditions	Min	Typ	Max	Model	Unit
HFE	IC = 0.1mA, VCE = 1V	20			60.89	
HFE	IC = 1mA, VCE = 1V	35			120.6	
HFE	IC = 10mA, VCE = 1V	50		150	139.8	
HFE	IC = 50mA, VCE = 1V	30			66.37	
HFE	IC = 100mA, VCE = 1V	15			37.08	
VCEsat	IC = 10mA, IC/IB = 10			0.2	0.116	V
VCEsat	IC = 50mA, IC/IB = 10			0.3	0.2281	V
VBEsat	IC = 10mA, IC/IB = 10	0.65		0.85	0.768	V
VBEsat	IC = 50mA, IC/IB = 10			0.95	0.8671	V
FT	IC = 10mA, VCE = 20V	250			367.7	MHz
CIB	VEB = 0.5V			8	3.68	pF
COB	VCB = 5V			4	2.008	pF
TS	VCC = 3V, IC = 10mA, IC/IBF = 10, IBF/IBR = 1			175	159.8	nsec
TF	VCC = 3V, IC = 10mA, IC/IBF = 10, IBF/IBR = 1			50	37.58	nsec

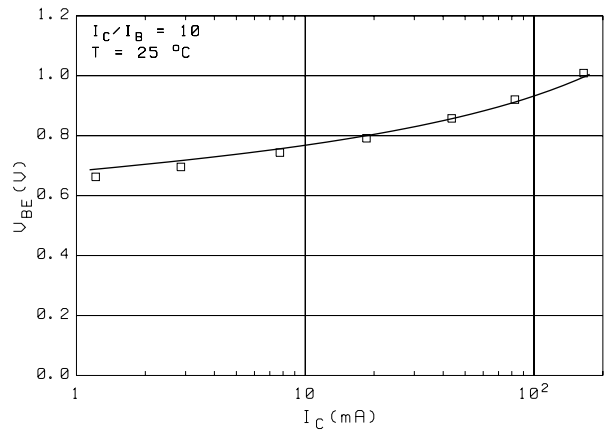
2N3904: DC Extraction



IC-UCESat

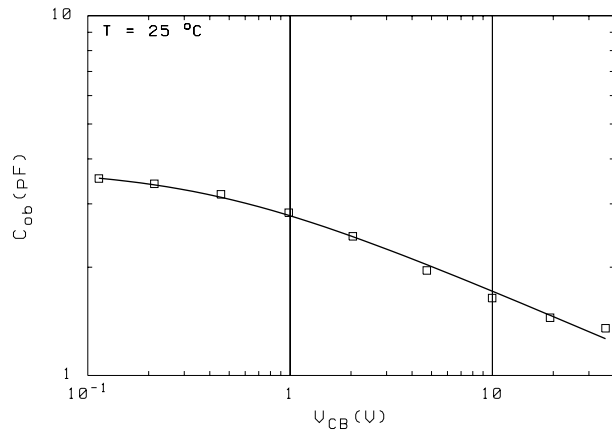


IC-HFE (VCE)

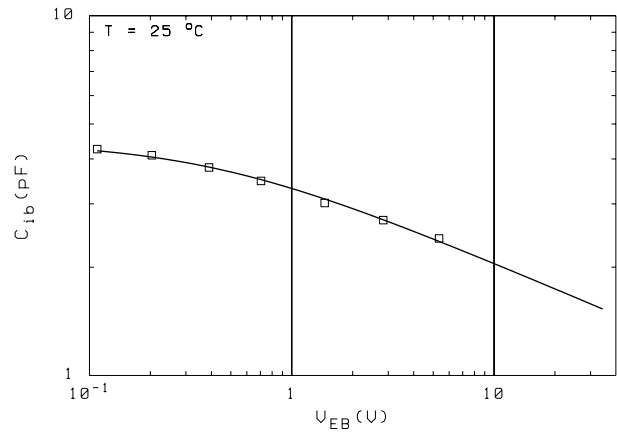


IC-UBESat

2N3904: AC Extraction



UCB-COB



UEB-CIB