

BJT NONLINEAR MODEL PARAMETERS(1)

Parameters	Q1	Q2	Parameters	Q1	Q2
IS	7e-16	3.8e-16	MJC	0.34	0.48
BF	109	135.7	XCJC	0	0.56
NF	1	1	CJS	0	0
VAF	15	28	VJS	0.75	0.75
IKF	0.19	0.6	MJS	0	0
ISE	7.9e-13	3.8e-15	FC	0.5	0.75
NE	2.19	1.49	TF	2e-12	11e-12
BR	1	12.3	XTF	5.2	0.36
NR	1.08	1.1	VTF	4.58	0.65
VAR	12.4	3.5	ITF	0.01	0.61
IKR	Infinity	0.06	PTF	0	50
ISC	0	3.5e-16	TR	1e-9	32e-12
NC	2	1.62	EG	1.11	1.11
RE	1.3	0.4	XTB	0	0
RB	10	6.14	XTI	3	3
RBM	8.34	3.5	KF	0	1.5e-14
IRB	0.009	0.001	AF	1	1.22
RC	10	4.2			
CJE	0.4e-12	0.796e-12			
VJE	0.81	0.71			
MJE	0.5	0.38			
CJC	0.18e-12	0.549e-12			
VJC	0.75	0.65			

(1) Gummel-Poon Model

UNITS

Parameter	Units
time	seconds
capacitance	farads
inductance	henries
resistance	ohms
voltage	volts
current	amps

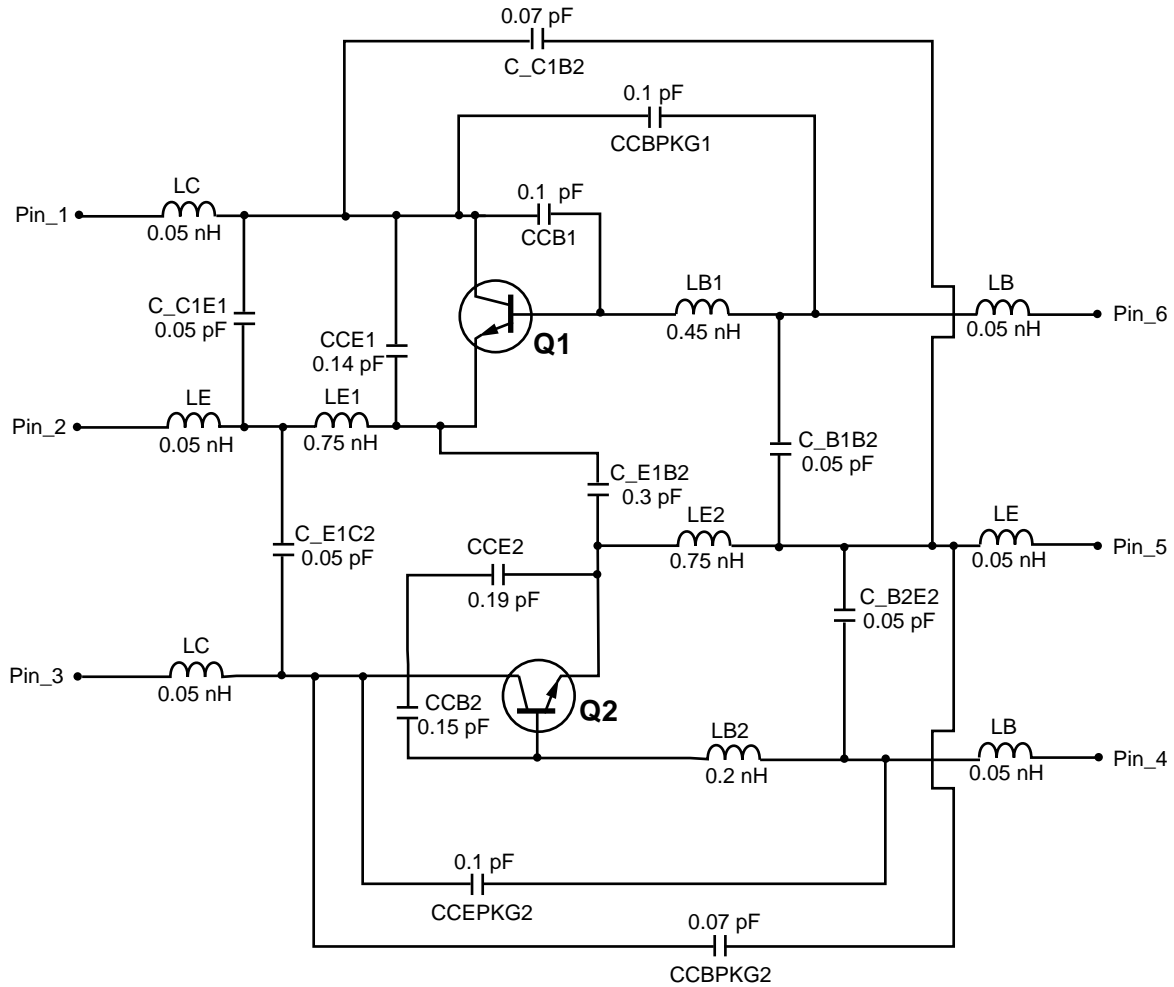
MODEL RANGE

Frequency: 0.1 to 3.0 GHz
 Bias: $V_{CE} = 0.5 \text{ V to } 5 \text{ V}$, $I_c = 1 \text{ mA to } 10 \text{ mA}$
 Date: 10/98

Note:

This nonlinear model utilized the latest data available. See our Design Parameter Library at www.cel.com for this data.

SCHEMATIC



MODEL RANGE

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BUILT-IN TRANSISTORS

	Q1	Q2
3-pin small mini mold part No.	NE68530	NE68830

ORDERING INFORMATION

PART NUMBER	QUANTITY	PACKAGING
UPA836TF-T1	3000	Tape & Reel

The UPA833TF features the Q1 and Q2 in inverted positions.

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DATA SUBJECT TO CHANGE WITHOUT NOTICE

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