

BJT NONLINEAR MODEL PARAMETERS (1)

Parameters	Q1, Q2	Parameters	Q1, Q2
IS	3.8e-16	MJC	0.48
BF	135.7	XCJC	0.56
NF	1	CJS	0
VAF	28	VJS	0.75
IKF	0.6	MJS	0
ISE	3.8e-15	FC	0.75
NE	1.49	TF	9e-12
BR	12.3	XTF	0.36
NR	1.1	VTF	0.65
VAR	3.5	ITF	0.61
IKR	0.06	PTF	50
ISC	3.5e-16	TR	32e-12
NC	1.62	EG	1.11
RE	0.4	XTB	0
RB	6.14	XTI	3
RBM	3.5	KF	0
IRB	0.001	AF	1
RC	4.2		
CJE	0.796e-12		
VJE	0.71		
MJE	0.38		
CJC	0.45e-12		
VJC	0.65		

(1) Gummel-Poon Model

Note:

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

UNITS

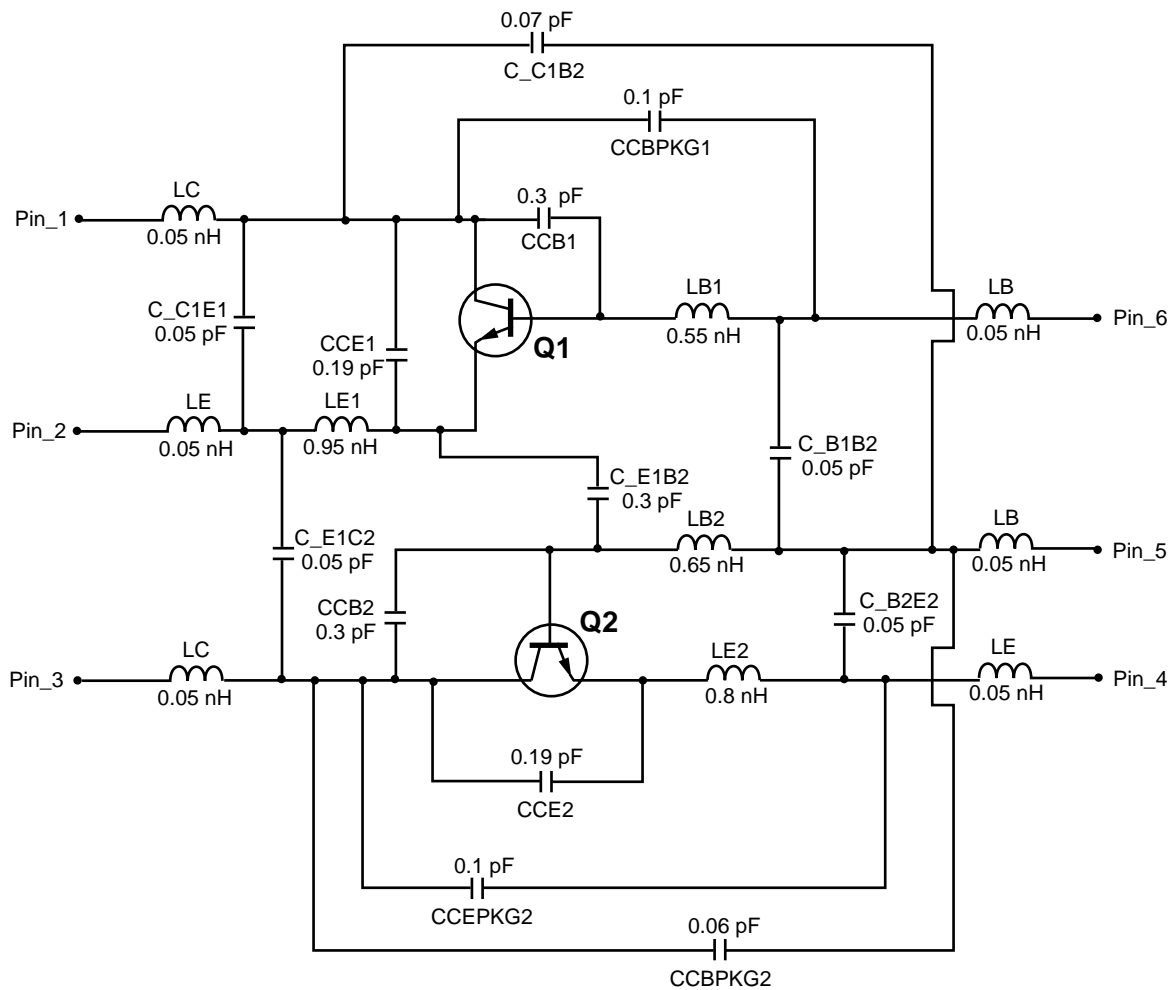
Parameter	Units
time	seconds
capacitance	farads
inductance	henries
resistance	ohms
voltage	volts
current	amps

MODEL RANGE

Frequency: 0.1 to 3.0 GHz
Bias: VCE = 1 V to 5 V, IC = 1 mA to 10 mA
Date: 11/98

NONLINEAR MODEL

SCHEMATIC



MODEL RANGE

Frequency: 0.1 to 3.0 GHz
 Bias: $V_{CE} = 1\text{ V to }5\text{ V}$, $I_c = 1\text{ mA to }10\text{ mA}$
 Date: 11/98