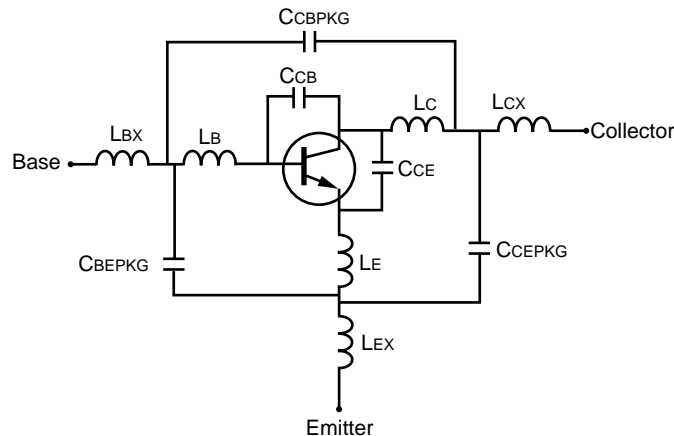


SCHEMATIC



BJT NONLINEAR MODEL PARAMETERS ⁽¹⁾

Parameters	Q1	Parameters	Q1
IS	1.6e-16	MJC	0.3
BF	111	XCJC	0.3
NF	1.02	CJS	0
VAF	23	VJS	0.75
IKF	0.38	MJS	0
ISE	1e-6	FC	0.55
NE	30	TF	3e-12
BR	12	XTF	0.1
NR	1.02	VTF	0.8
VAR	2.5	ITF	0.14
IKR	0.1	PTF	23.5
ISC	3e-15	TR	1e-11
NC	1.28	EG	1.11
RE	0.77	XTB	0
RB	3.5	XTI	3
RBM	20	KF	0
IRB	1.3e-3	AF	1
RC	8.75		
CJE	0.4e-12		
VJE	0.6		
MJE	0.5		
CJC	0.1e-12		
VJC	0.75		

(1) Gummel-Poon Model

UNITS

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

ADDITIONAL PARAMETERS

Parameters	NE662M04
CCB	0.09e-12
CCE	0.09e-12
LB	1.0e-9
LC	0.6e-9
LE	0.22e-9
CCBPKG	0.001e-12
CCEPKG	0.3e-12
CBEPKG	0.21e-12
LBX	0.2e-9
LCX	0.2e-9
LEX	0.07e-9

MODEL RANGE

Frequency: 0.1 to 12 GHz
 Bias: VCE = 0.5 V to 3 V, Ic = 1 mA to 20 mA
 Date: 01/12/2000