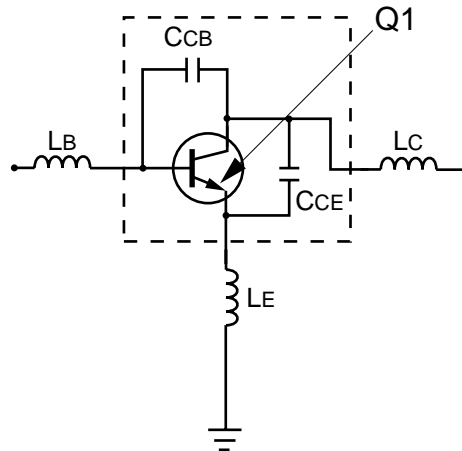


SCHEMATIC



BJT NONLINEAR MODEL PARAMETERS ⁽¹⁾

Parameters	Q1	Parameters	Q1
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	11.0e-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	0.032e-9
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	0.549e-12		
VJC	0.65		

(1) Gummel-Poon Model

UNITS

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

ADDITIONAL PARAMETERS

Parameters	68800
CcB	0.24e-12
CcE	0.27e-12
Lb	0.72e-9
Lc	0.51e-9
Le	0.19e-9

MODEL RANGE

Frequency: 0.1 to 10.0 GHz
 Bias: $V_{CE} = 1\text{ V to }3\text{ V}$, $I_c = 1\text{ mA to }10\text{ mA}$
 P1dB: 12.5 dBm at $V_{CE} = 3\text{ V}$, $I_c = 10\text{ mA}$, 2 GHz
 Date: 10/3/96