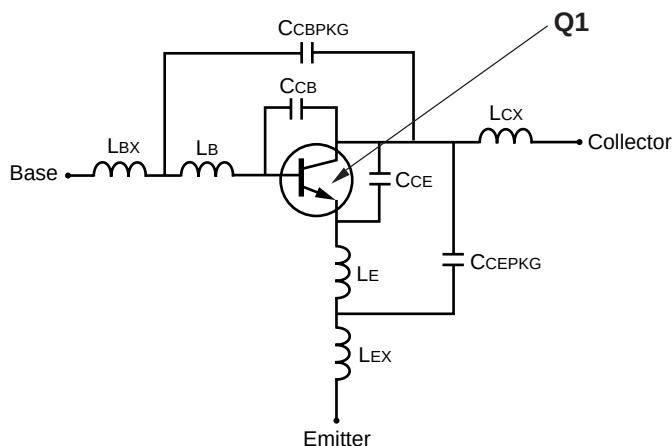


SCHEMATIC



BJT NONLINEAR MODEL PARAMETERS⁽¹⁾

Parameters	Q1	Parameters	Q1
IS	2.7e-16	MJC	0.56
BF	185.0	XCJC	0
NF	1.02	CJS	0
VAF	15.0	VJS	0.75
IKF	0.055	MJS	0
ISE	1.77e-11	FC	0.5
NE	2.1	TF	14.0e-12
BR	1	XTF	3
NR	1	VTF	25
VAR	Infinity	ITF	0.1
IKR	Infinity	PTF	0
ISC	0	TR	0.3e-9
NC	2	EG	1.11
RE	0.6	XTB	0
RB	12	XTI	3
RBM	3.7	KF	0
IRB	1.2e-5	AF	1
RC	8		
CJE	1.2e-12		
VJE	0.77		
MJE	0.5		
CJC	0.8e-12		
VJC	0.27		

(1) Gummel-Poon Model

UNITS

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

ADDITIONAL PARAMETERS

Parameters	68119
CCB	0.07e-12
CCE	0.01e-12
LB	1.13e-9
LE	0.85e-9
CCBPKG	0.18e-12
CCEPKG	0.21e-12
LBX	0.19e-9
LCX	0.19e-9
LEX	0.19e-9

MODEL RANGE

Frequency: 0.05 to 3.0 GHz

Bias: $V_{CE} = 2.5 \text{ V to } 8.0 \text{ V}$, $I_C = 0.3 \text{ mA to } 10 \text{ mA}$

California Eastern Laboratories

EXCLUSIVE NORTH AMERICAN AGENT FOR **NEC** RF, MICROWAVE & OPTOELECTRONIC SEMICONDUCTORS

CEL CALIFORNIA EASTERN LABORATORIES • Headquarters • 4590 Patrick Henry Drive • Santa Clara, CA 95054-1817 • (408) 988-3500 • Telex 34-6393 • FAX (408) 988-0279
24-Hour Fax-On-Demand: 800-390-3232 (U.S. and Canada only) • Internet: <http://WWW.CEL.COM>

DATA SUBJECT TO CHANGE WITHOUT NOTICE

PRINTED IN USA ON RECYCLED PAPER -10/98

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

CEL:

[NE68039-A](#) [NE68033-T1B-R45-A](#)