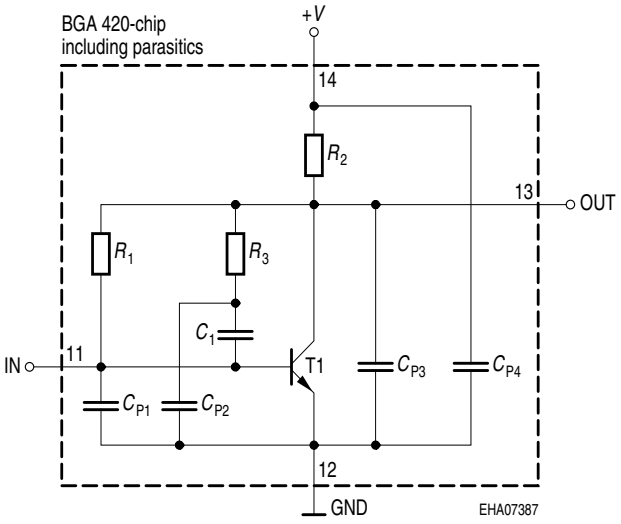
Spice-model BGA 420



T1	T501
R_1	14.5kΩ
R_2	140Ω
R_3	2.4kΩ
C_1	2.3pF
C_{P1}	0.2pF
C_{P2}	0.2pF
C_{P3}	0.6pF
C_{P4}	0.1pF

Transistor Chip Data T1 (Berkley-SPICE 2G.6 Syntax) :

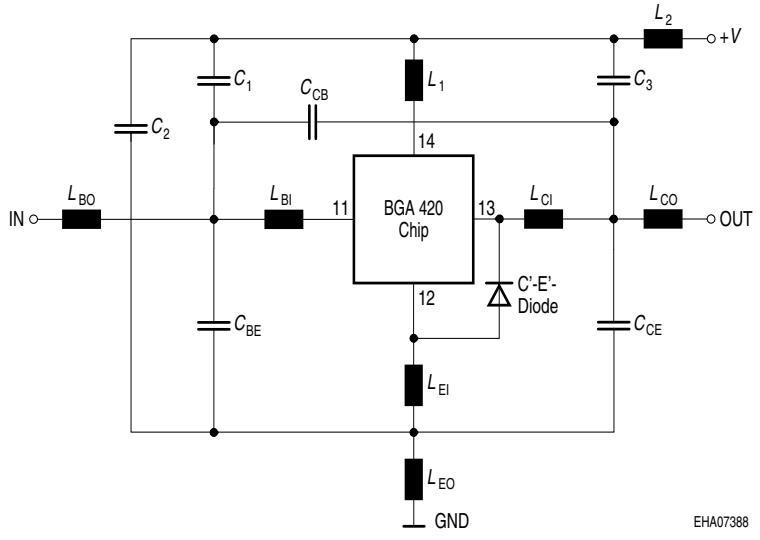
IS =	0.21024	fA	BF =	83.23	-	NF =	1.0405	-
VAF =	39.251	V	IKF =	0.16493	A	ISE =	15.761	fA
NE =	1.7763	-	BR =	10.526	-	NR =	0.96647	-
VAR =	34.368	V	IKR =	0.25052	A	ISC =	0.037223	fA
NC =	1.3152	-	RB =	15	Ω	IRB =	0.21215	A
RBM =	1.3491	Ω	RE =	1.9289		RC =	0.12691	Ω
CJE =	3.7265	fF	VJE =	0.70367	V	MJE =	0.37747	-
TF =	4.5899	ps	XTF =	0.3641	-	VTF =	0.19762	V
ITF =	1.3364	mA	PTF =	0	deg	CJC =	96.941	fF
VJC =	0.99532	V	MJC =	0.48652	-	XCJC =	0.08161	-
TR =	1.4935	ns	CJS =	0	fF	VJS =	0.75	V
MJS =	0	-	XTB =	0	-	EG =	1.11	eV
XTI =	3	-	FC =	0.99469	-	TNOM	300	K

C'-E'-Diode Data (Berkley-SPICE 2G.6 Syntax) :

IS =	2	fA	N =	1.02	-	RS =	20	Ω

All parameters are ready to use, no scaling is necessary

Package Equivalent Circuit:



L_{BI} =	0.36	nH
L_{BO} =	0.4	nH
L_{EI} =	0.3	nH
L_{EO} =	0.15	nH
L_{CI} =	0.36	nH
L_{CO} =	0.4	nH
C_{BE} =	95	fF
C_{CB} =	6	fF
C_{CE} =	132	fF
C_1 =	28	fF
C_2 =	88	fF
C_3 =	8	fF
L_1 =	0.6	nH
L_2 =	0.4	nH

Valid up to 3GHz

Extracted on behalf of SIEMENS Small Signal Semiconductors by:
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For examples and ready to use parameters please contact your local Infineon Technologies distributor or salesoffice to obtain a Infineon Technologies CD-ROM or see Internet: http://www.infineon.com/products/discrete/index.htm