

Device Modeling Report

COMPONENTS: Inductance
PART NUMBER: LQH55PN4R7NR0
MANUFACTURER: Murata Manufacturing Co., Ltd.
Remark: DC Model

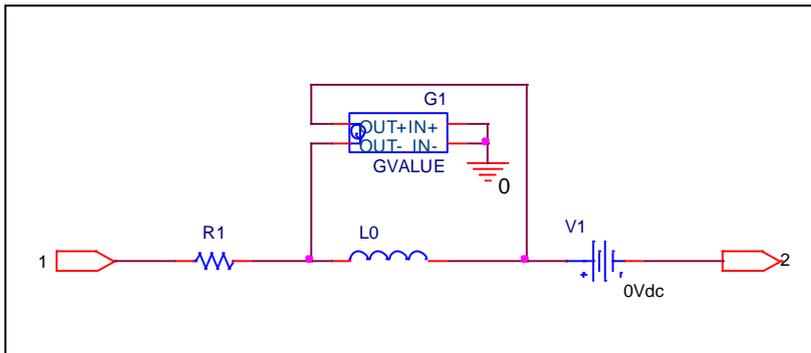


Bee Technologies Inc.

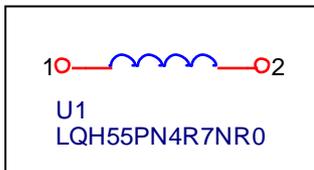
SPICE MODEL

```
*$
* PART NUMBER: LQH55PN4R7NR0
* MANUFACTURER: Murata Manufacturing Co., Ltd.
* All Rights Reserved Copyright (C) Bee Technologies Inc. 2010
.subckt LQH55PN4R7NR0 1 2
R_R1 1 N1 0.06
V_V1 N09991 2 0Vdc
G_G1 N09991 N1 VALUE {
+ I(V_V1)*I(V_V1)*I(V_V1)*-0.032 }
L_L0 N1 N09991 4.8uH
.ENDS
*$
```

Model Equivalent Circuit

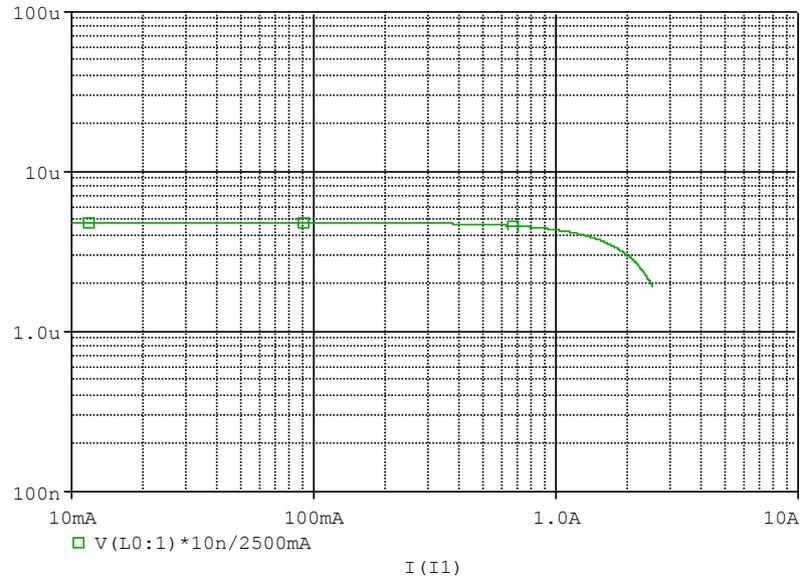


Circuit Configuration

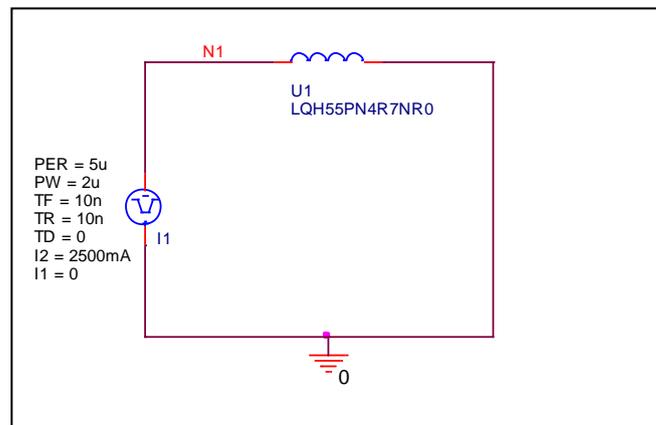


Inductance-Current Characteristics

Circuit Simulation result

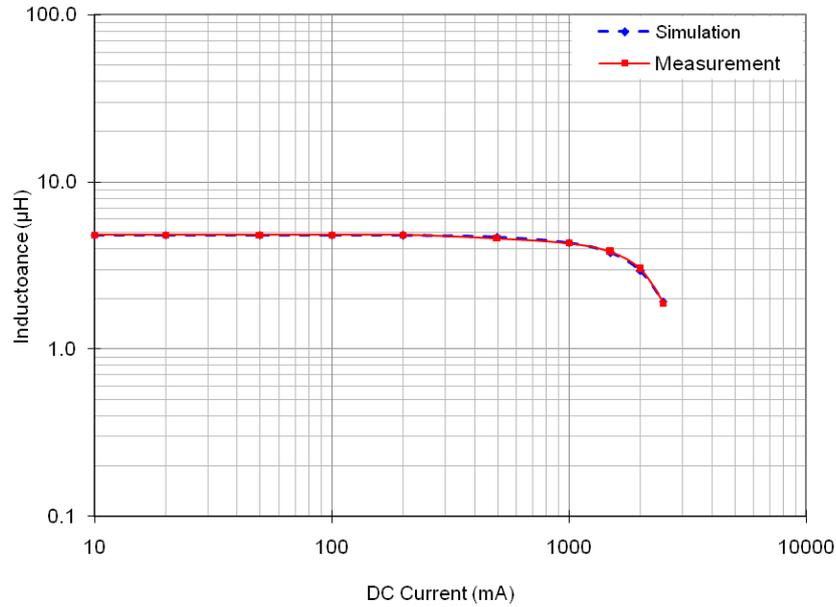


Evaluation circuit



Comparison Graph

Simulation result



Comparison table

I (mA)	L (µH)		%Error
	Measurement	Simulation	
10	4.800	4.800	0.00
20	4.800	4.799	-0.02
50	4.800	4.798	-0.04
100	4.800	4.795	-0.10
200	4.800	4.781	-0.40
500	4.600	4.685	1.85
1000	4.300	4.339	0.91
1500	3.815	3.763	-1.36
2000	3.000	2.956	-1.47
2500	1.875	1.920	2.40