

# Device Modeling Report

COMPONENTS: Inductance  
PART NUMBER: LQH44PN1R0NP0  
MANUFACTURER: Murata Manufacturing Co., Ltd.  
Remark: DC Model

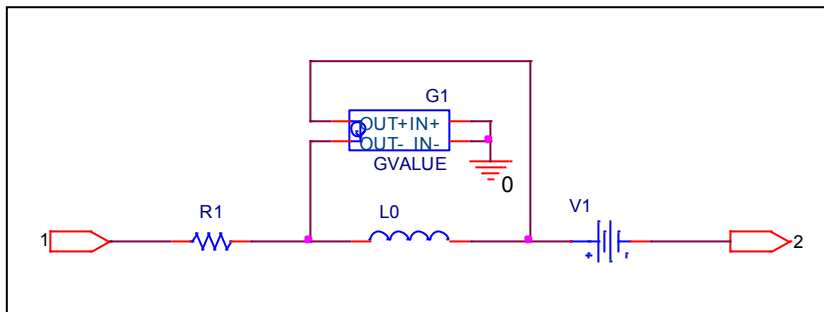


**Bee Technologies Inc.**

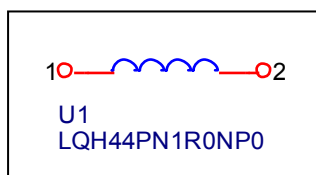
## SPICE MODEL

```
*$
* PART NUMBER: LQH44PN1R0NP0
* MANUFACTURER: Murata Manufacturing Co., Ltd.
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.subckt LQH44PN1R0NP0 1 2
V_V1 N06268 2 0Vdc
G_G1 N06268 N06258 VALUE { I(V_V1)*I(V_V1)*I(V_V1)*-0.0078 }
L_L0 N06258 N06268 0.985uH
R_R1 1 N06258 0.03
.ENDS
*$
```

## Model Equivalent Circuit

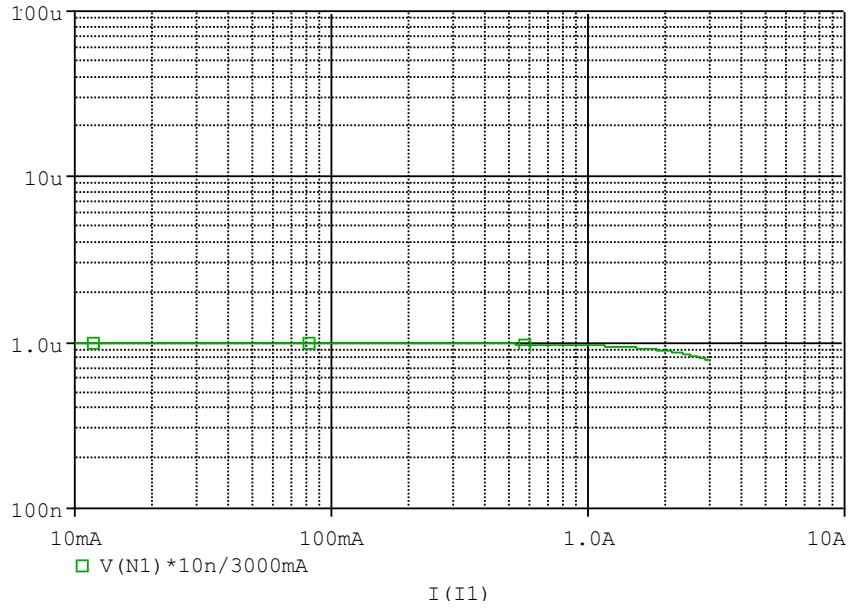


## Circuit Configuration

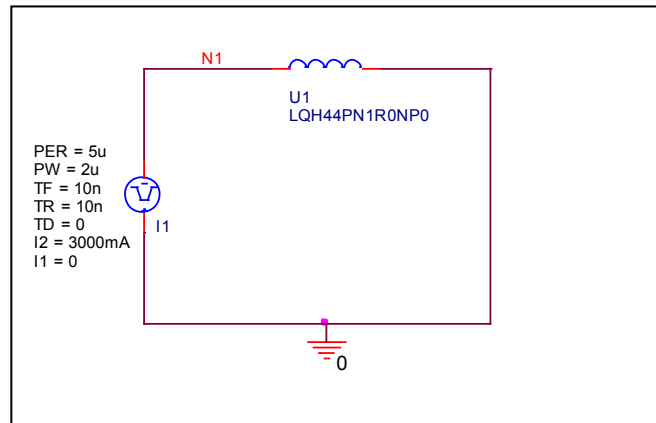


# Inductance-Current Characteristics

## Circuit Simulation result

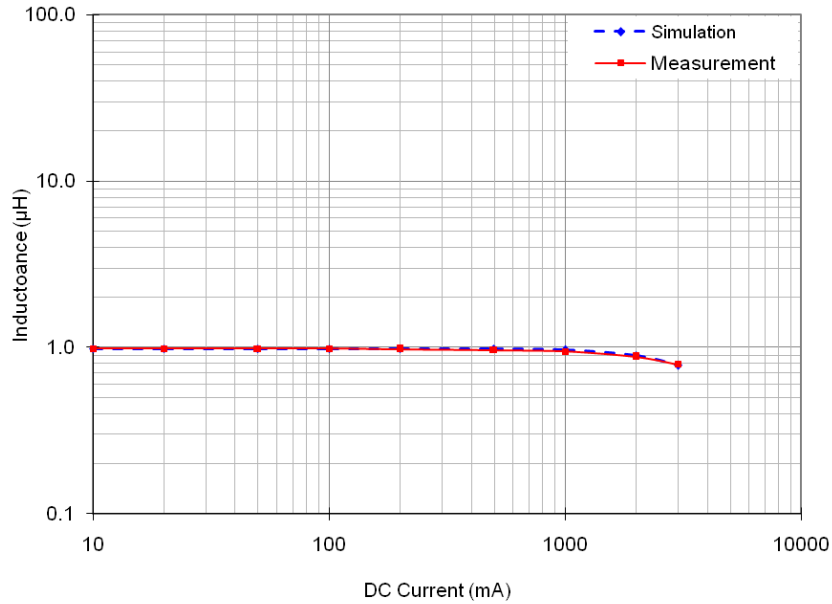


## Evaluation circuit



# Comparison Graph

## Simulation result



## Comparison table

I (mA)	L (µH)		%Error
	Measurement	Simulation	
10	0.985	0.984	-0.10
20	0.980	0.984	0.41
50	0.985	0.984	-0.10
100	0.985	0.984	-0.10
200	0.975	0.984	0.92
500	0.965	0.979	1.45
1000	0.945	0.961	1.69
2000	0.875	0.892	1.94
3000	0.790	0.777	-1.65