

# Device Modeling Report

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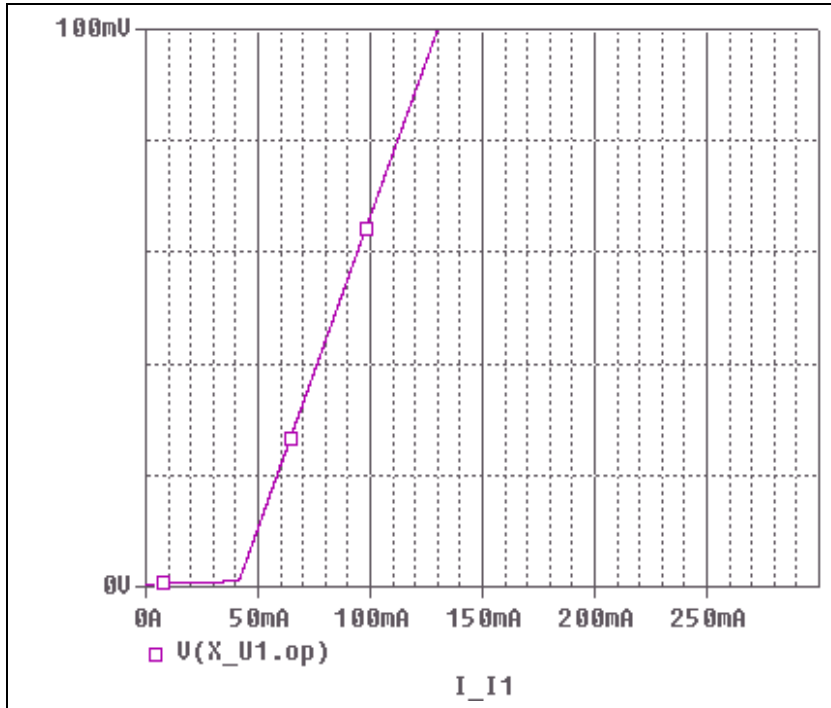


**Bee Technologies Inc.**

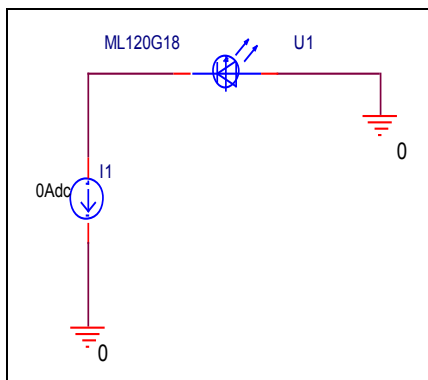
PSpice model parameter	Model description
IS	Saturation Current
N	Emission Coefficient
RS	Series Resistance
IKF	High-injection Knee Current
CJO	Zero-bias Junction Capacitance
M	Junction Grading Coefficient
VJ	Junction Potential
ISR	Recombination Current Saturation Value
BV	Reverse Breakdown Voltage(a positive value)
IBV	Reverse Breakdown Current(a positive value)
TT	Transit Time

## Optical Output Power vs. Forward current characteristics

Circuit simulation result

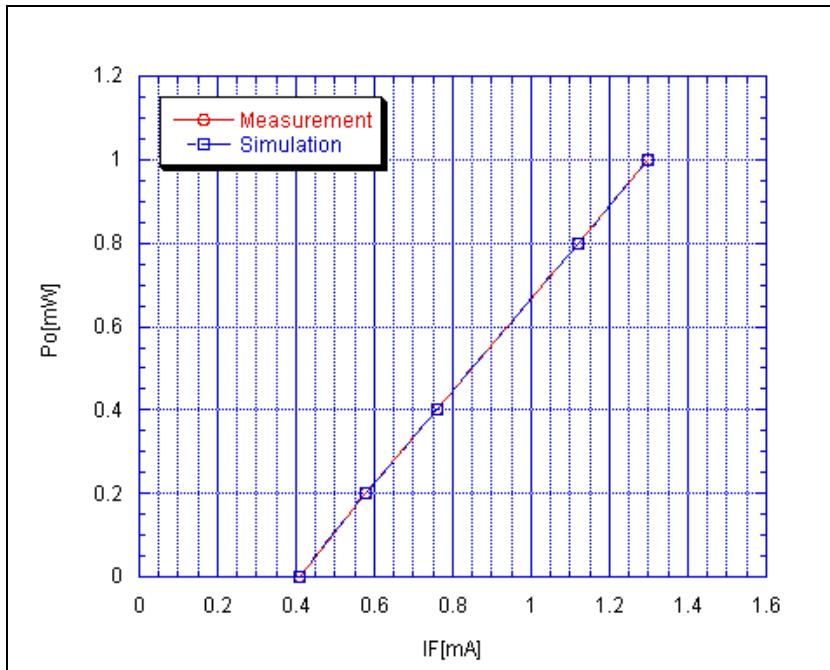


Evaluation circuit



## Comparison graph

Circuit simulation result



Simulation Result

Po[mW]	IF[mA]		Error (%)
	Measurement	Simulation	
0	0.41	0.41	0
0.2	0.58	0.579	0.17241
0.4	0.76	0.759	0.13157
0.6	0.94	0.94	0
0.8	1.12	1.12	0
1	1.3	1.3	0