Device Modeling Report

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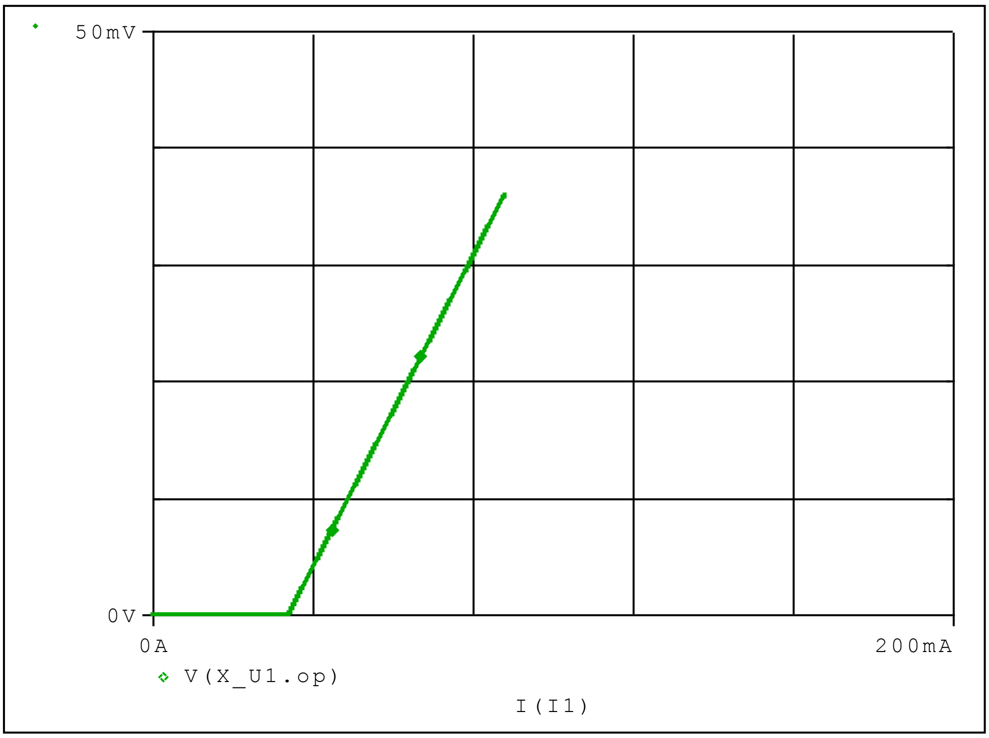
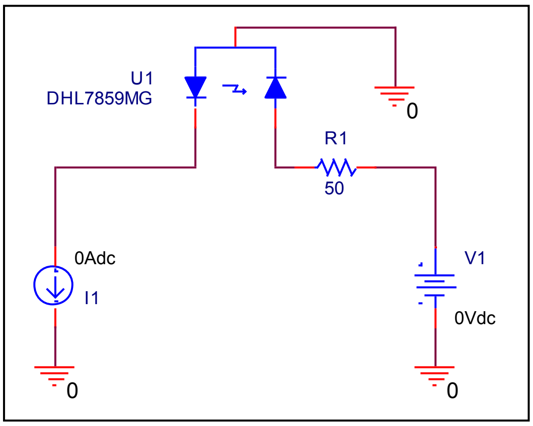
PSpice model parameter	Model description
IS	Saturation Current
N	Emission Coefficient
RS	Series Resistance
IKF	High-injection Knee Current
CJO	Zero-bias Junction Capacitance
M	Junction Grading Coefficient
VJ	Junction Potential
ISR	Recombination Current Saturation Value
BV	Reverse Breakdown Voltage(a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

Optical Output Power vs. Forward current characteristics

Circuit simulation result

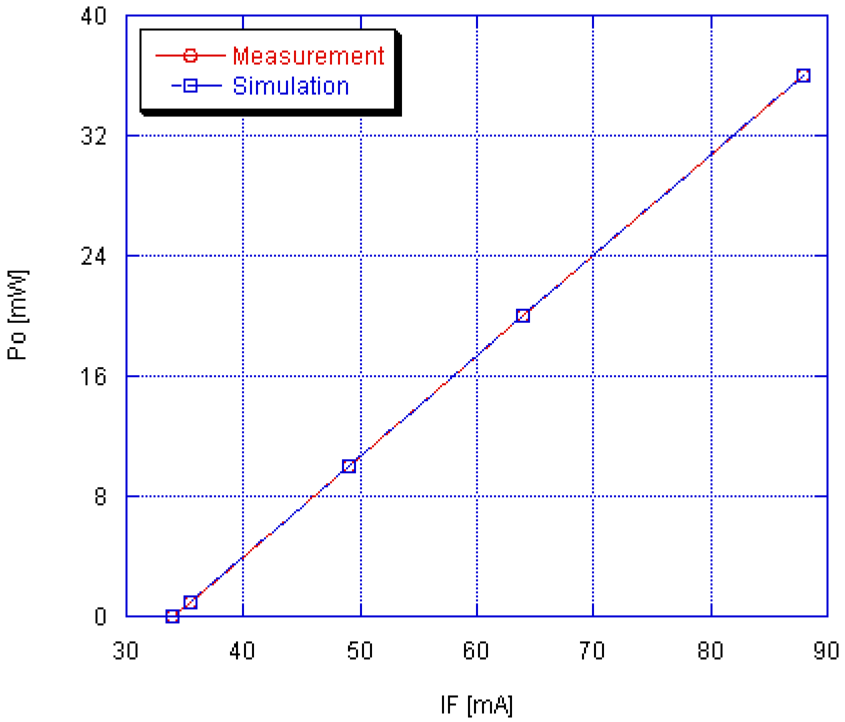


Evaluation circuit



Comparison graph

Circuit simulation result

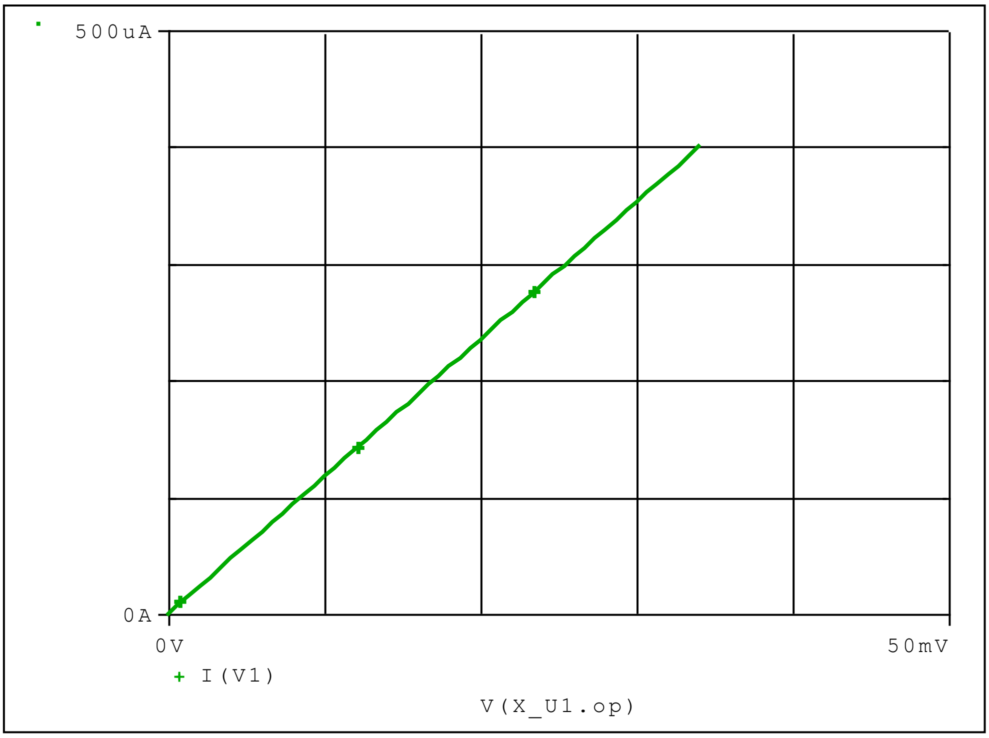


Simulation Result

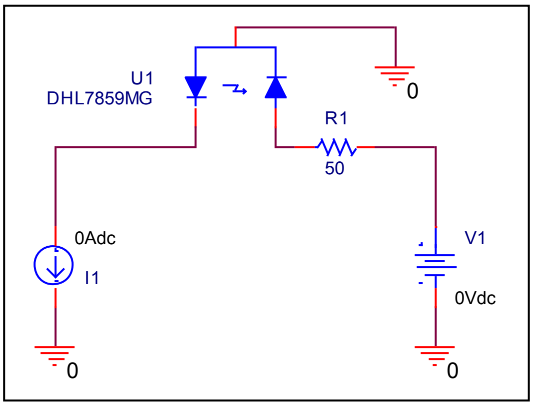
Po [mW]	IF [mA]		Error (%)
	Measurement	Simulation	
1.000	35.480	35.480	0.000
10.000	48.980	48.980	0.000
20.000	64.000	64.000	0.000
36.000	88.000	88.000	0.000

Monitor Current vs. Optical Output Power characteristics

Circuit simulation result

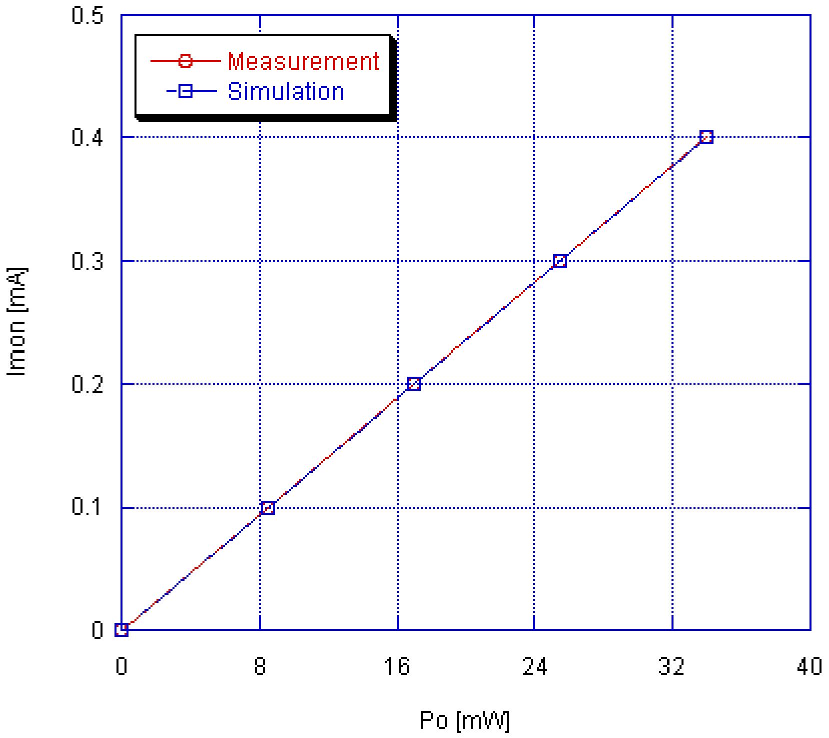


Evaluation circuit



Comparison graph

Circuit simulation result



Simulation Result

Imon [mA]	Po [mW]		Error (%)
	Measurement	Simulation	
0.100	8.500	8.500	0.000
0.200	17.000	17.000	0.000
0.300	25.500	25.500	0.000
0.400	34.000	34.000	0.000