

Device Modeling Report

COMPONENTS:
DIODE/ SCHOOTKY RECTIFIER / STANDARD
PART NUMBER: D5S6M
MANUFACTURER: SHINDENGEN

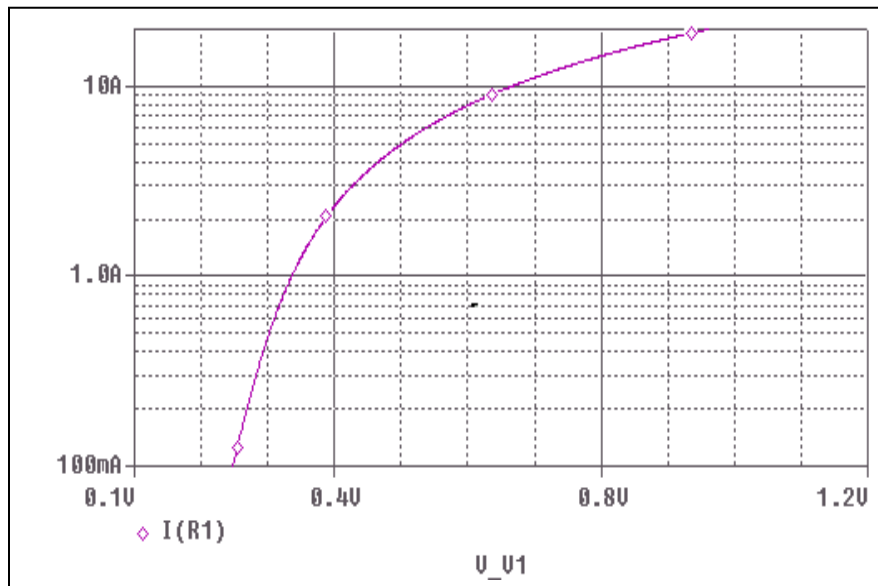


Bee Technologies Inc.

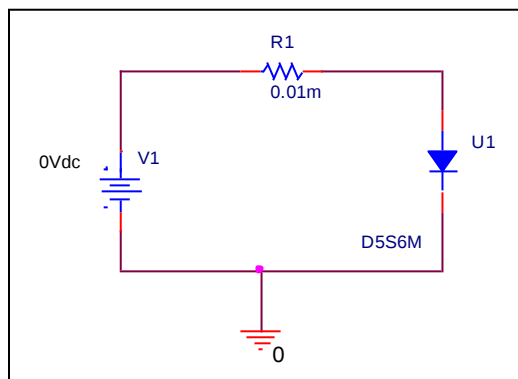
PSpice model parameter	Model description
IS	Saturation Current
N	Emission Coefficient
RS	Series Resistance
IKF	High-injection Knee Current
CJO	Zero-bias Junction Capacitance
M	Junction Grading Coefficient
VJ	Junction Potential
ISR	Recombination Current Saturation Value
BV	Reverse Breakdown Voltage(a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

Forward Current Characteristic

Circuit Simulation Result

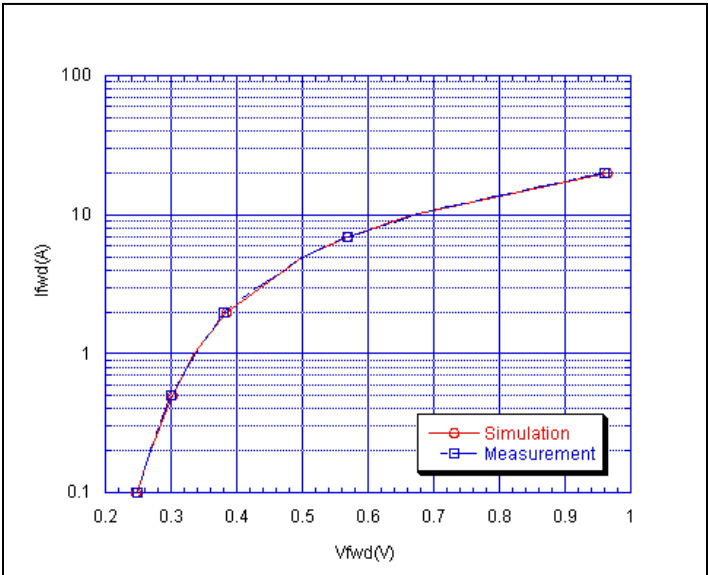


Evaluation Circuit



Comparison Graph

Circuit Simulation Result

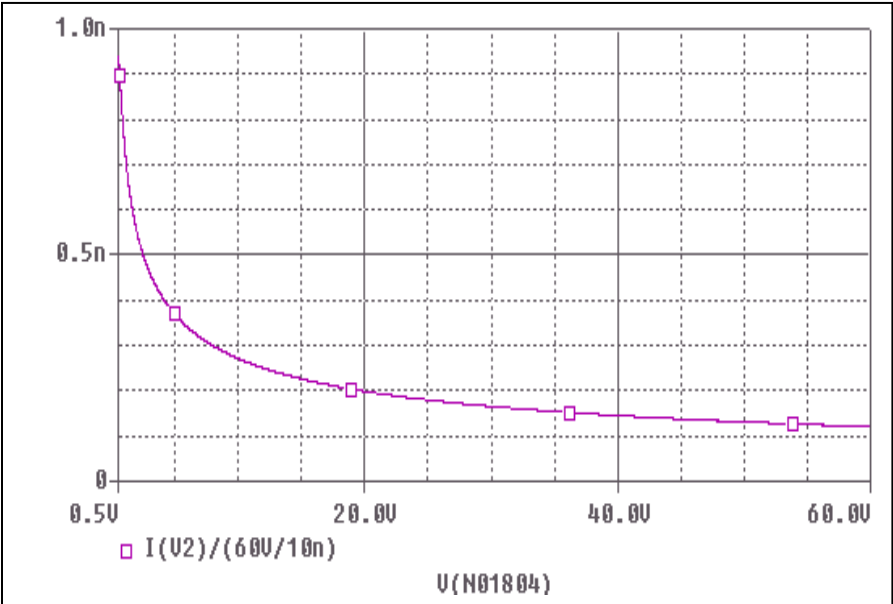


Simulation Result

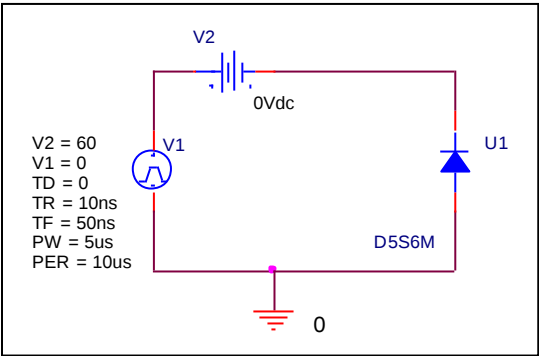
Ifwd(A)	Vfwd(V) Measurement	Vfwd(V) Simulation	%Error
0.1	0.25	0.25	-1.04
0.2	0.27	0.27	-0.56
0.5	0.30	0.30	0.50
1	0.34	0.34	-0.15
2	0.38	0.39	1.34
5	0.50	0.50	0.00
10	0.67	0.67	-0.36
20	0.96	0.96	0.48

Junction Capacitance Characteristic

Circuit Simulation Result

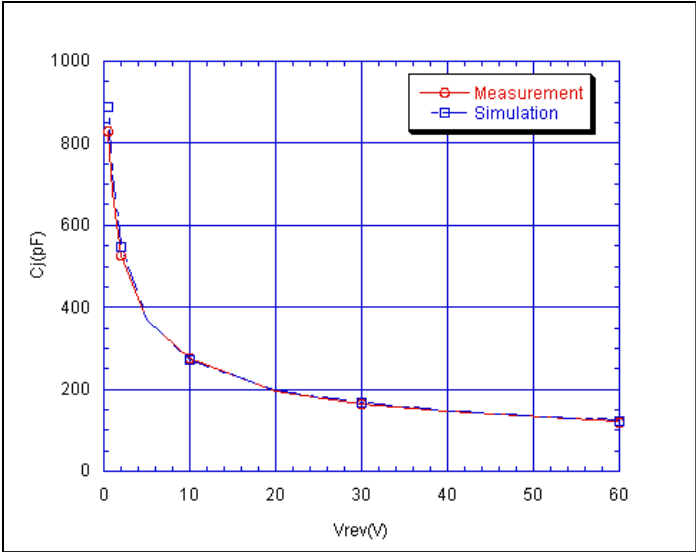


Evaluation Circuit



Comparison Graph

Circuit Simulation Result



Simulation Result

Vrev(V)	Cj(pF) Measurement	Cj(pF) Simulation	%Error
1	700.00	720.00	2.86
2	535.00	548.00	2.43
5	375.00	368.30	-1.79
10	275.00	271.20	-1.38
20	195.00	198.70	1.90
40	145.00	145.20	0.14
60	120.000	121.000	0.83