

Device Modeling Report

COMPONENTS:

DIODE/ SCHOOTKY RECTIFIER / STANDARD

PART NUMBER: 11EQS06

MANUFACTURER: NIEC

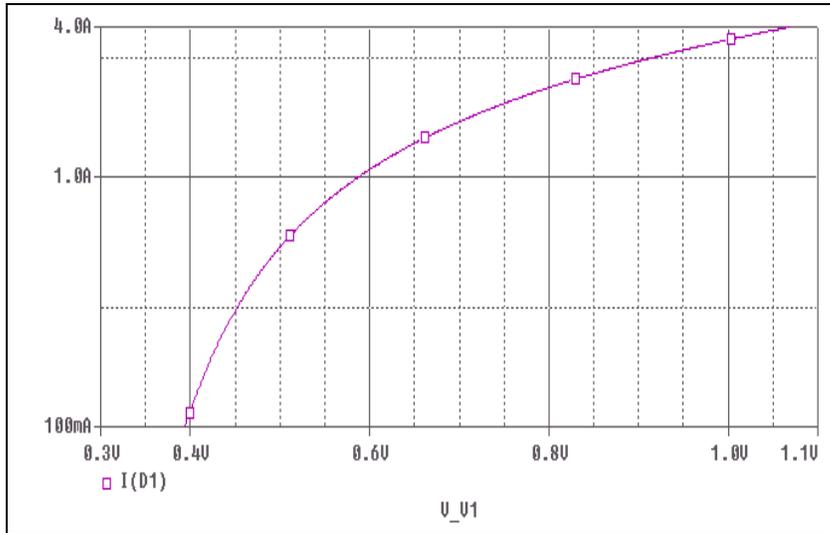


Bee Technologies Inc.

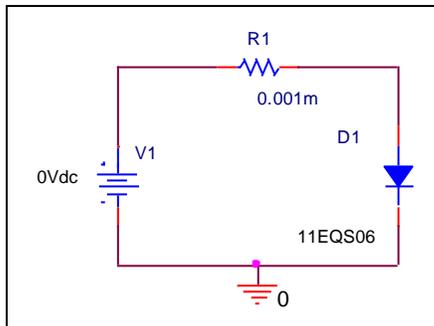
PSpice model parameter	Model description
IS	Saturation Current
N	Emission Coefficient
RS	Series Resistance
IKF	High-injection Knee Current
CJO	Zero-bias Junction Capacitance
M	Junction Grading Coefficient
VJ	Junction Potential
ISR	Recombination Current Saturation Value
BV	Reverse Breakdown Voltage(a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

Forward Current Characteristic

Circuit Simulation Result

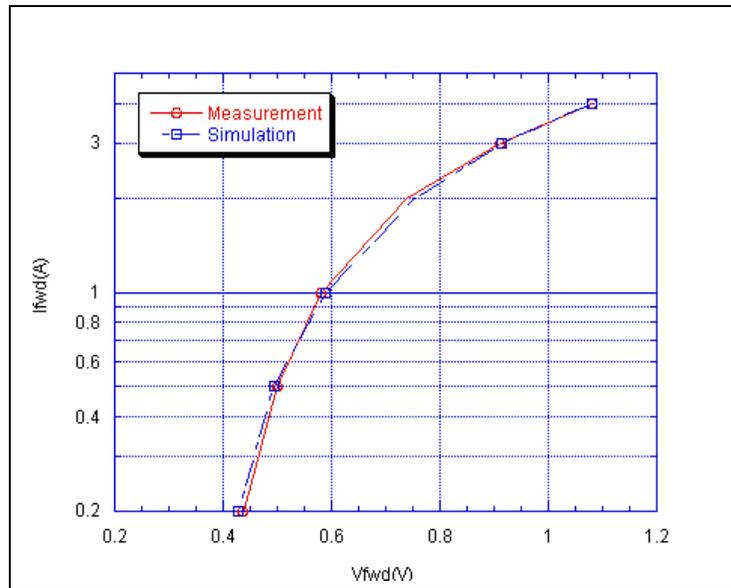


Evaluation Circuit



Comparison Graph

Circuit Simulation Result

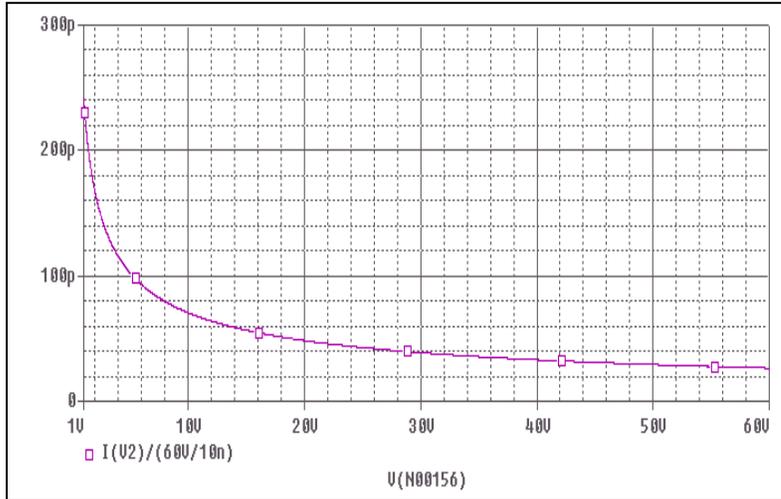


Simulation Result

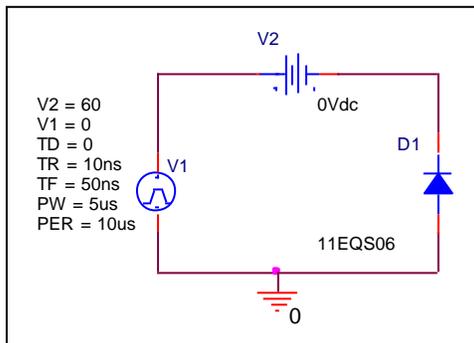
Ifwd(A)	Vfwd(V) Measurement	Vfwd(V) Simulation	%Error
0.1	0.395	0.394	-0.25
0.2	0.435	0.427	-1.84
0.5	0.500	0.494	-1.20
1	0.580	0.588	1.38
2	0.740	0.754	1.89
3	0.910	0.914	0.44
4	1.080	1.070	-0.93

Junction Capacitance Characteristic

Circuit Simulation Result

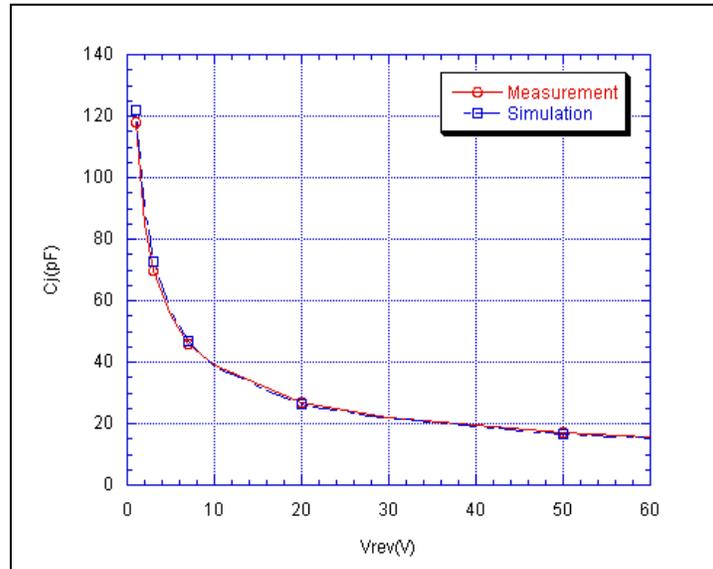


Evaluation Circuit



Comparison Graph

Circuit Simulation Result



Simulation Result

Vrev(V)	Cj(pF) Measurement	Cj(pF) Simulation	%Error
1	118.000	122.000	3.39
2	85.000	88.200	3.76
3	70.000	72.500	3.57
5	55.000	56.000	1.82
7	46.000	46.700	1.52
10	39.000	38.600	-1.03
20	27.000	26.500	-1.85
30	22.00	21.30	-3.18
50	17.00	16.50	-2.94
60	15.00	14.60	-2.67