

Device Modeling Report

COMPONENTS:
DIODE/ SCHOOTTKY RECTIFIER / STANDARD
PART NUMBER: KSQ60A06B
MANUFACTURER: NIEC

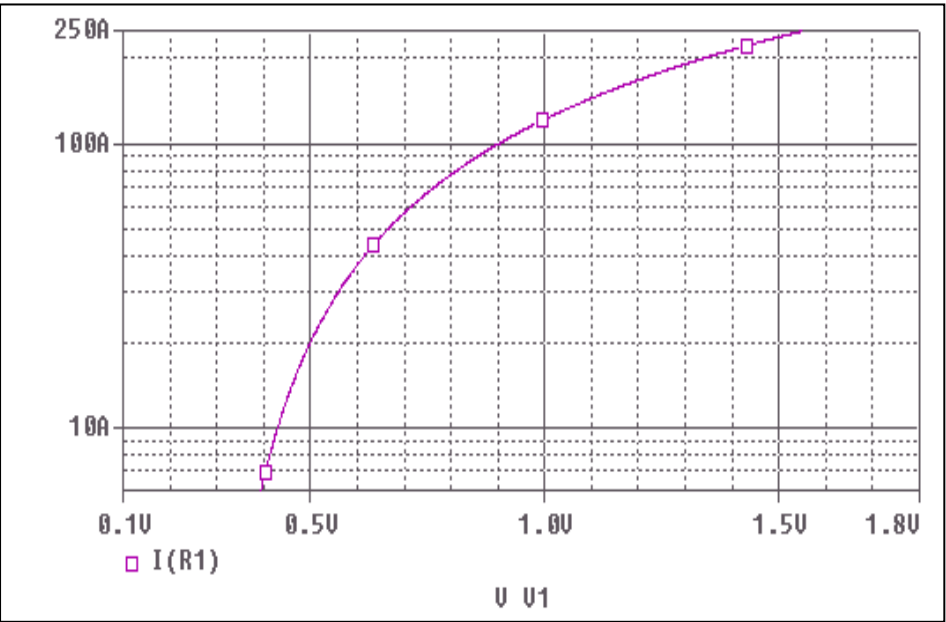


Bee Technologies Inc.

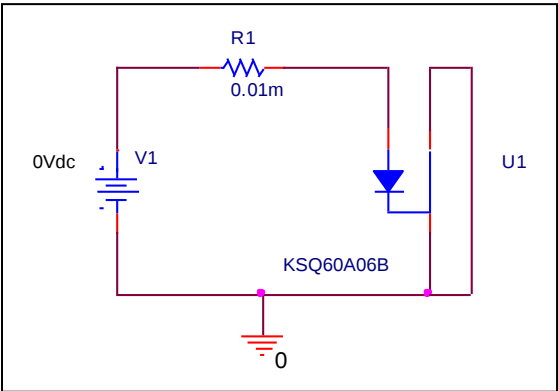
PSpice model parameter	Model description
IS	Saturation Current
N	Emission Coefficient
RS	Series Resistance
IKF	High-injection Knee Current
CJO	Zero-bias Junction Capacitance
M	Junction Grading Coefficient
VJ	Junction Potential
ISR	Recombination Current Saturation Value
BV	Reverse Breakdown Voltage(a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

Forward Current Characteristic

Circuit Simulation Result

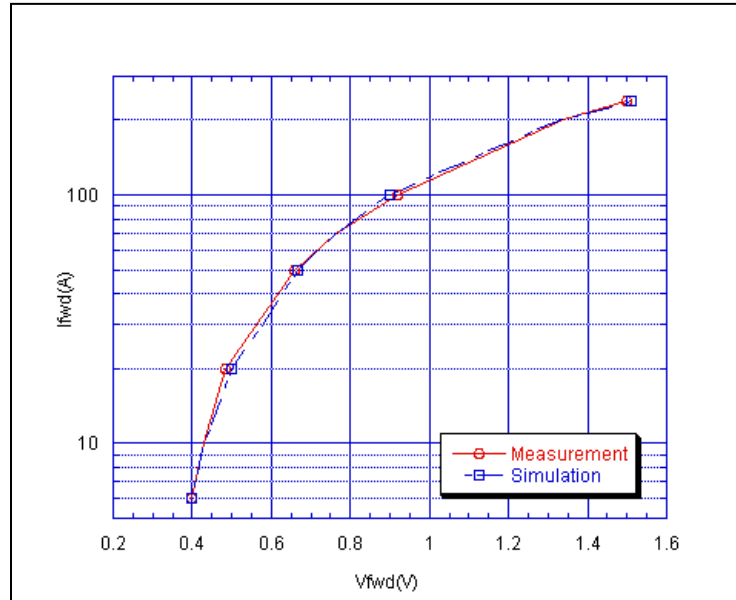


Evaluation Circuit



Comparison Graph

Circuit Simulation Result

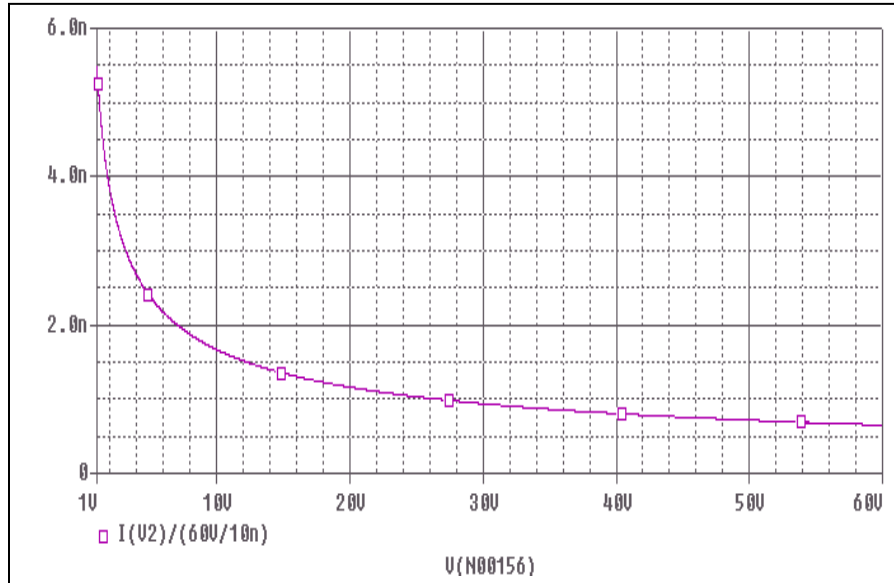


Simulation Result

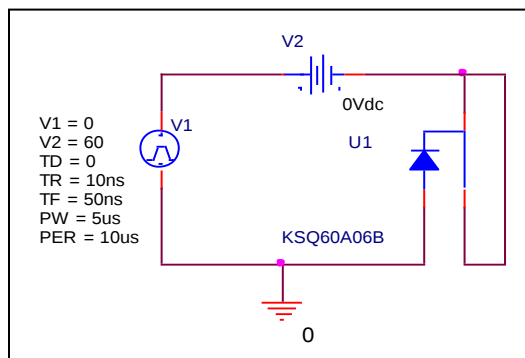
Ifwd(A)	Vfwd (V) (Measurement)	Vfwd(V) Simulation	%Error
6	0.398	0.400	0.50
10	0.428	0.430	0.47
20	0.491	0.500	1.83
50	0.660	0.665	0.79
100	0.920	0.902	-1.96
200	1.338	1.340	0.15

Junction Capacitance Characteristic

Circuit Simulation Result

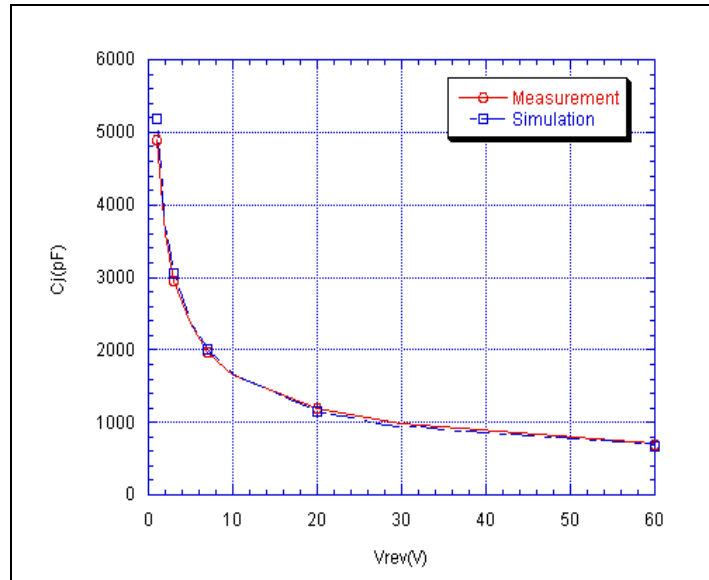


Evaluation Circuit



Comparison Graph

Circuit Simulation Result



Simulation Result

Vrev(V)	Cj(pF) Measurement	Cj(pF) Simulation	%Error
1	4988.000	5177.000	3.79
2	3600.000	3676.000	2.11
5	2360.000	2379.000	0.81
10	1660.000	1663.000	0.18
20	1190.000	1161.000	-2.44
30	975.000	938.300	-3.76
60	700.000	672.500	-3.93