

Device Modeling Report

COMPONENTS:
DIODE/ SCHOOTKY RECTIFIER / STANDARD
PART NUMBER: KSL60A01B
MANUFACTURER: NIEC

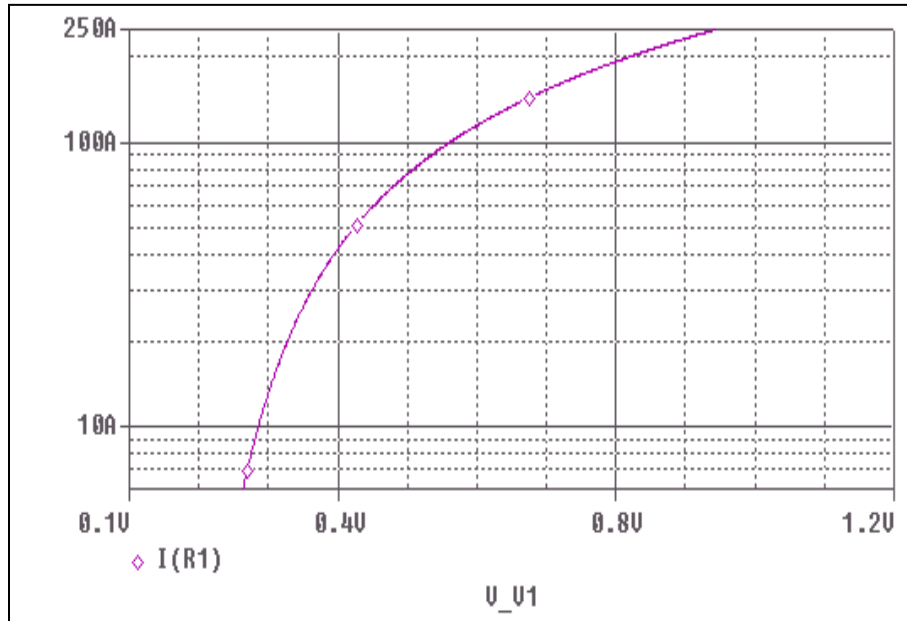


Bee Technologies Inc.

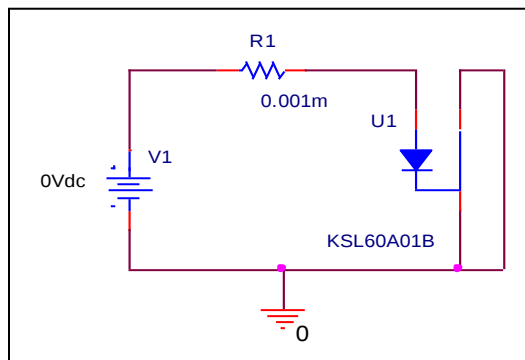
PSpice model parameter	Model description
IS	Saturation Current
N	Emission Coefficient
RS	Series Resistance
IKF	High-injection Knee Current
CJO	Zero-bias Junction Capacitance
M	Junction Grading Coefficient
VJ	Junction Potential
ISR	Recombination Current Saturation Value
BV	Reverse Breakdown Voltage(a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

Forward Current Characteristic

Circuit Simulation Result

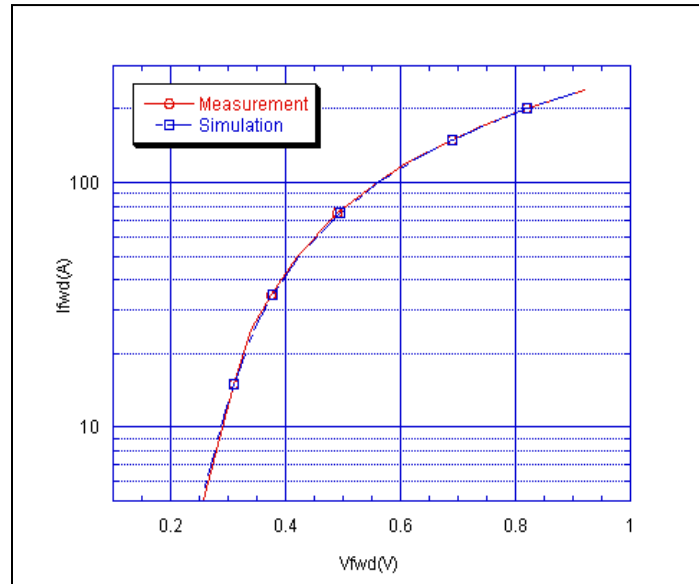


Evaluation Circuit



Comparison Graph

Circuit Simulation Result

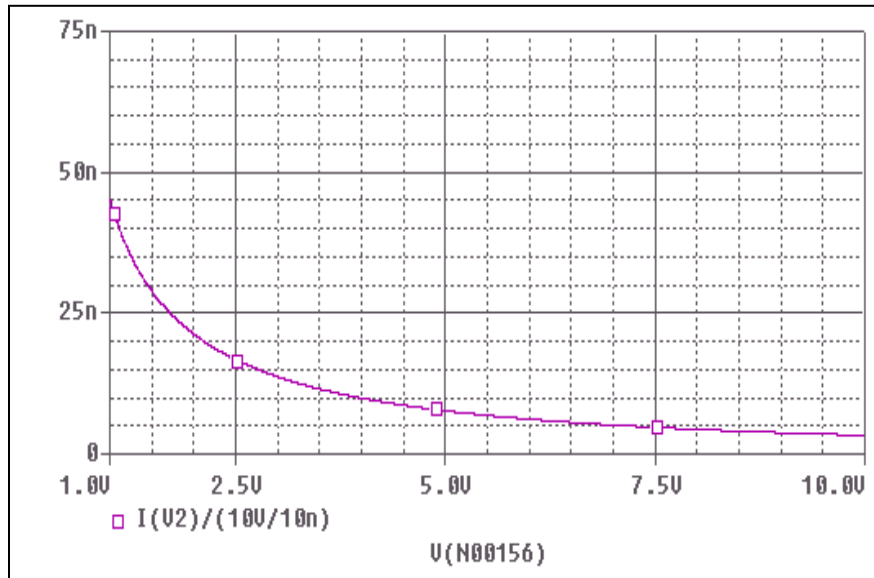


Simulation Result

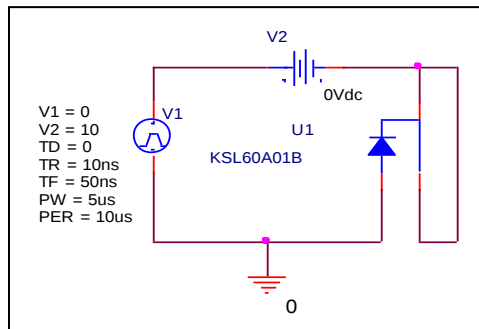
Ifwd(A)	Vfwd(V) Measurement	Vfwd(V) Simulation	%Error
5	0.255	0.250	-1.96
25	0.341	0.345	1.17
50	0.421	0.423	0.48
100	0.561	0.560	-0.18
120	0.611	0.614	0.49
170	0.741	0.743	0.27
200	0.821	0.820	-0.12
240	0.921	0.920	-0.11

Junction Capacitance Characteristic

Circuit Simulation Result

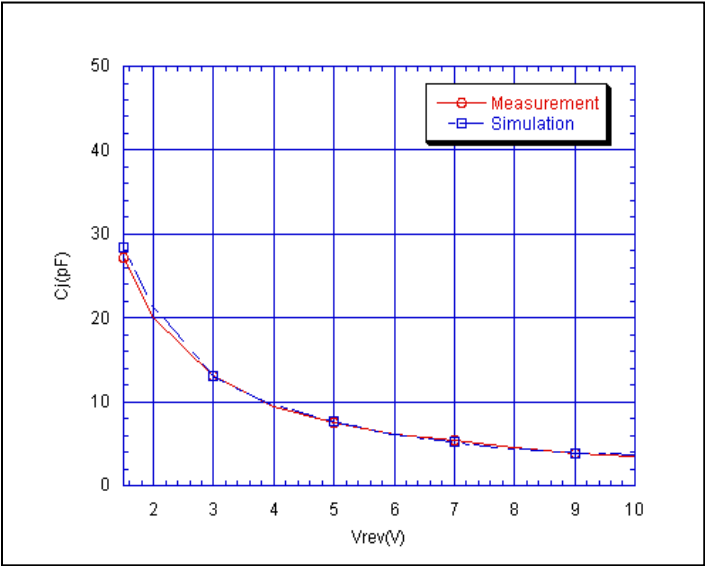


Evaluation Circuit



Comparison Graph

Circuit Simulation Result



Simulation Result

Vrev(V)	Cj(pF) Measurement	Cj(pF) Simulation	%Error
1.5	27.100	28.370	4.69
2	21.000	21.290	1.38
5	7.520	7.678	2.10
6	6.150	6.183	0.54
8	4.470	4.441	-0.65
10	3.400	3.475	2.21